

# SERVICE MANUAL

## AE-6B CHASSIS

MODEL	COMMANDER	DEST	CHASSIS NO.	MODEL	COMMANDER	DEST	CHASSIS NO.
<b>KV-28FX66B</b>	RM-937	FR	SCC-Q83H-A	<b>KV-32FX66B</b>	RM-937	FR	SCC-Q83G-A
<b>KV-28FX66E</b>	RM-937	ESP	SCC-Q81K-A	<b>KV-32FX66E</b>	RM-937	ESP	SCC-Q81J-A
<b>KV-28FX66U</b>	RM-937	UK	SCC-Q84F-A	<b>KV-32FX66K</b>	RM-937	OIRT	SCC-Q82E-A
				<b>KV-32FX66U</b>	RM-937	UK	SCC-Q84E-A

## FD Trinitron



KV-28/32FX66



RM-937

TRINITRON<sup>®</sup> COLOR TV  
**SONY<sup>®</sup>**

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## CAUTION

**SHORT CIRCUIT THE ANODE OF THE PICTURE TUBE AND THE ANODE CAP TO THE METAL CHASSIS, CRT SHIELD, OR THE CARBON PAINTED ON THE CRT, AFTER REMOVAL OF THE ANODE CAP.**

## WARNING !!

AN ISOLATION TRANSFORMER SHOULD BE USED DURING ANY SERVICE WORK TO AVOID POSSIBLE SHOCK HAZARD DUE TO LIVE CHASSIS, THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE POWER LINE.

## SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY SHADING AND MARKED  $\Delta$  ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL FOR SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

## ATTENTION

**APRES AVOIR DECONNECTE LE CAP DE L'ANODE, COURT-CIRCUITER L'ANODE DU TUBE CATHODIQUE ET CELUI DE L'ANODE DU CAP AU CHASSIS METALLIQUE DE L'APPAREIL, OU AU COUCHE DE CARBONE PEINTE SUR LE TUBE CATHODIQUE OU AU BLINDAGE DU TUBE CATHODIQUE.**

## ATTENTION !!

AFIN D'EVITER TOUT RISQUE D'ELECTROCUTION PROVENANT D'UN CHÂSSIS SOUS TENTION, UN TRANSFORMATEUR D'ISOLEMENT DOIT ETRE UTILISÉ LORS DE TOUT DÉPANNAGE LE CHÂSSIS DE CE RÉCEPTEUR EST DIRECTMENT RACCORDÉ À L'ALIMENTATION SECTEUR.

## ATTENTION AUX COMPOSANTS RELATIFS À LA SECURITÉ!!

LES COMPOSANTS IDENTIFIÉS PAR UNE TRAME ET PAR UNE MARQUE  $\Delta$  SUR LES SCHÉMAS DE PRINCIPE, LES VUES EXPLOSÉES ET LES LISTES DE PIÈCES SONT D'UNE IMPORTANCE CRITIQUE POUR LA SÉCURITÉ DU FONCTIONNEMENT, NE LES REMPLACER QUE PAR DES COMPOSANTS SONY DONT LE NUMÉRO DE PIÈCE EST INDICÉ DANS LE PRÉSENT MANUEL OU DANS DES SUPPLÉMENTS PUBLIÉS PAR SONY.



## CAUTION

### Lead Free Soldered Boards

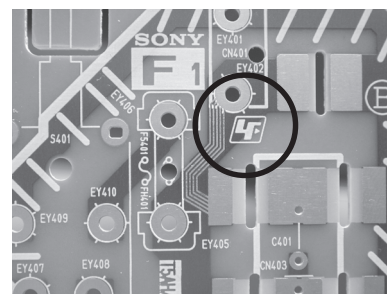
The circuit boards listed below [Table 1] used in these models may have been processed using Lead Free Solder. The boards are identified by the LF logo located close to the board designation e.g. F1, H1 etc [ see examples ]. The servicing of these boards requires special precautions to be taken as outlined below.



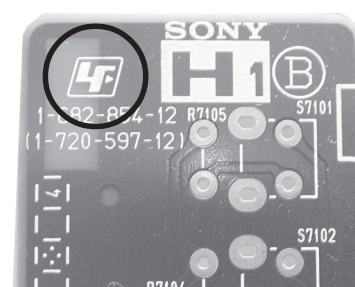
Table 1

Board	Function
C	R,G,B Out
F4	Power Switch & Fuse
H1	LED & IR Receiver
H2	Front AV and Headphone

example 1



example 2



It is strongly recommended to use Lead Free Solder material in order to guarantee optimal quality of new solder joints. Lead Free Solder is available under the following part numbers :

Partnumber	Diameter	Remarks
7-640-005-19	0.3mm	0.25Kg
7-640-005-20	0.4mm	0.50Kg
7-640-005-21	0.5mm	0.50Kg
7-640-005-22	0.6mm	0.25Kg
7-640-005-23	0.8mm	1.00Kg
7-640-005-24	1.0mm	1.00Kg
7-640-005-25	1.2mm	1.00Kg
7-640-005-26	1.6mm	1.00Kg

Due to the higher melting point of Lead Free Solder the soldering iron tip temperature needs to be set to 370 degrees centigrade. This requires soldering equipment capable of accurate temperature control coupled with a good heat recovery characteristics.

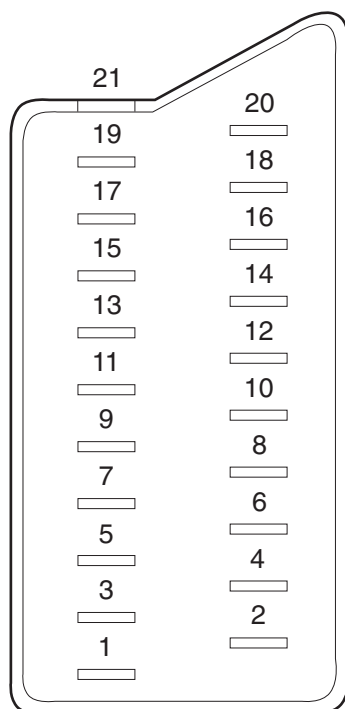
For more information on the use of Lead Free Solder, please refer to <http://www.sony-training.com>

ITEM MODEL	Television System	Stereo System	Channel Coverage	Color System
B	B/G/H, D/K, I, L	GERMAN/NICAM Stereo	VHF : E2-E12, R1-R12, S01-S03, F02-F10, B-Q UHF : E21-E69, F21-F69, B21-B69, R21-R69 CABLE TV : S01-S20 HYPER : S21-S41	PAL, SECAM NTSC4.43, NTSC3.58 (VIDEO IN)
E	B/G/H, D/K	GERMAN/NICAM Stereo	VHF : E2-E12, R1-R12, S01-S03 UHF : E21-E69, R21-R69 CABLE TV : S01-S20 HYPER : S21-S41	PAL, SECAM NTSC4.43, NTSC3.58 (VIDEO IN)
K	B/G/H, D/K	GERMAN/NICAM Stereo	VHF : E2-E12, R1-R12, S01-S03 UHF : E21-E69, R21-R69 CABLE TV : S01-S20 HYPER : S21-S41	PAL, SECAM NTSC4.43, NTSC3.58 (VIDEO IN)
U	I	NICAM Stereo	UHF : B21-B69	PAL, SECAM NTSC4.43, NTSC3.58 (VIDEO IN)

Picture Tube	Flat Display FD Trinitron Approx 71 cm (28 inches) (Approx 66 cm picture measured diagonally) KV-28FX66 Approx 82 cm (32 inches) (Approx 76 cm picture measured diagonally) KV-32FX66	Sound output	
		Right and Left speaker	2x20W (Music Power)    2x10W (RMS)
		Sub Woofer	1x30W (Music Power)    1x15W (RMS)
Input/Output Terminals [REAR]		General Specifications	
1: 21-pin Euro connector (CENELEC standard)	Inputs for Audio and Video signals. Inputs for RGB. Outputs of TV Video and Audio signals.	Power Requirements	220 - 240V
		Power Consumption	125W (KV-28FX66) 130W (KV-32FX66)
2: 21-pin Euro connector	Inputs for Audio and Video signals. Inputs for S Video. Outputs of TV Video and Audio signals. (selectable)	Dimensions	Approx 785x515x525mm (KV-28FX66) Approx 883x567x562mm (KV-32FX66)
		Weight	Approx 47kg (KV-28FX66) Approx 64kg (KV-32FX66)
3: 21-pin Euro connector	Inputs for Audio and Video signals. Inputs for S Video. Outputs of TV Video and Audio signals. (Monitor Out)	Supplied Accessories	RM-937 Remote Commander (1) IEC designated R6 battery (2)
Phono Jacks	Output Connectors variable for Audio Signals	Other Features	100 Hz picture, TV system Autodetection, Teletext, Smartlink, BBE, Virtual Dolby
Input/Output Terminals [SIDE]		Remote Control System : Infrared Control	
Headphone jack	stereo mini jack	Power requirements	3V dc 2 batteries IEC designation R6 (size AA)
Audio inputs	phono jacks		
Video inputs	phono jacks		
S Video input	4 pin DIN		
Design and specifications are subject to change without notice.			

Model Name Item	KV-28FX66B ~ KV-32FX66B	KV-28FX66E ~ KV-32FX66E	KV-28FX66U ~ KV-32FX66U	KV-32FX66K
Pal Comb	OFF	OFF	OFF	OFF
PIP	OFF	OFF	OFF	OFF
RGB Priority	ON	ON	ON	ON
Woofer Box	ON	ON	ON	ON
Scart 1	ON	ON	ON	ON
Scart 2	ON	ON	ON	ON
Scart 3	ON	ON	ON	ON
Side in (4)	ON	ON	ON	ON
Projector	OFF	OFF	OFF	OFF
Norm B/G	ON	ON	OFF	ON
Norm I	ON	OFF	ON	OFF
Norm D/K	ON	ON	OFF	ON
Norm AUS	OFF	OFF	OFF	OFF
Norm L	ON	OFF	OFF	OFF
Norm SAT	OFF	OFF	OFF	OFF
Norm M	OFF	OFF	OFF	OFF
Teletext	ON	ON	ON	ON
Nicam Stereo	ON	ON	ON	ON

## 21 pin connector



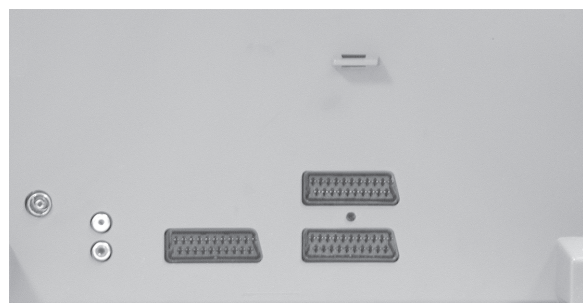
Pin No	1	2	3	Signal	Signal level
1	○	○	○	Audio output B (right)	Standard level : 0.5V rms Output impedance : Less than 1kohm*
2	○	○	○	Audio input B (right)	Standard level : 0.5V rms Output impedance : More than 10kohm*
3	○	○	○	Audio output A (left)	Standard level : 0.5V rms Output impedance : Less than 1kohm*
4	○	○	○	Ground (audio)	
5	○	○	○	Ground (blue)	
6	○	○	○	Audio input A (left)	Standard level : 0.5V rms Output impedance : More than 10kohm*
7	○	●	●	Blue input	0.7 +/- 3dB, 75 ohms positive
8	○	○	○	Function select (AV control)	High state (9.5-12V) : Part mode Low state (0-2V) : TV mode Input impedance : More than 10K ohms Input capacitance : Less than 2nF
9	○	○	○	Ground (green)	
10	○	○	○	Open	
11	○	●	●	Green	Green signal : 0.7 +/- 3dB, 75 ohms, positive
12	○	○	○	Open	
13	○	○	○	Ground (red)	
14	○	○	○	Ground (blanking)	
15	○	-	-	Red input	0.7 +/- 3dB, 75 ohms, positive
	-	○	○	(S signal Chroma input)	0.3 +/- 3dB, 75 ohms, positive
16	○	●	●	Blanking input (Ys signal)	High state (1-3V) Low state (0-0.4V) Input impedance : 75 ohms
17	○	○	○	Ground (video output)	
18	○	○	○	Ground (video input)	
19	○	○	○	Video output	1V +/- 3dB, 75ohms, positive sync 0.3V (-3+10dB)
20	○	-	-	Video input	1V +/- 3dB, 75ohms, positive sync 0.3V (-3+10dB)
	-	○	○	Video input Y (S signal)	1V +/- 3dB, 75ohms, positive sync 0.3V (-3+10dB)
21	○	○	○	Common ground (plug, shield)	

○ Connected



Not Connected (open) \* at 20Hz - 20kHz

## Rear Connection Panel



## Front Connection Panel

S-Video socket



S Video socket pin configuration		
Pin No	Signal	Signal Level
1	Ground	-
2	Ground	-
3	Y (S signal) input	1V +/- 3dB 75ohm, positive Sync. 0.3V -3 +10dB
4	C (S signal) input	0.3V +/- 3dB 75ohm, positive Sync.

## AE-6B SELF DIAGNOSTIC SOFTWARE

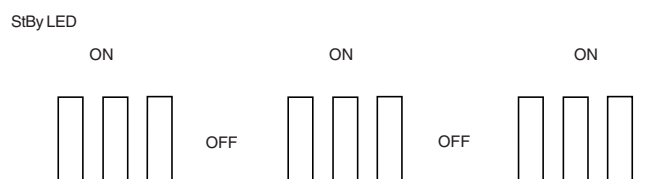
The identification of errors within the AE-6B chassis is triggered in one of two ways :- 1: Busy or 2: Device failure to respond to IIC. In the event of one of these situations arising the software will first try to release the bus if busy (Failure to do so will report with a continuous flashing LED) and then communicate with each device in turn to establish if a device is faulty. If a device is found to be faulty the relevant device number will be displayed through the LED (Series of flashes which must be counted) See table 1, non fatal errors are reported using this method.

Each time the software detects an error it is stored within the NVM. See Table 2.

**Table 1**

Error Message	LED Code
No error	00
Reserved	01
OCP ( Over Current Protection )	02
Over Voltage Protection	03
No Vertical Sync	04
IKR Error at power on	05
IIC bus clock and/or data lines low at power on	06
NVM no IIC bus acknowledge at power on	07
Horizontal Protection	08
Tuner no acknowledge at power on	09
Sound Processor Error	10
Reserved	11
Scanrate Error	12
DAC Error	13
Backend Error	14
Dynamic Convergence Error	15
PIP Error	16

### Flash Timing Example : e.g. error number 3



### How to enter into Table 2

1. Turn on the main power switch of the TV set.
2. Program Remote Commander for Operation in Service Mode. [See Page 21].
3. Press 'VIDEO' 'VIDEO' > 'MENU' on the Remote Commander.
4. Using the Remote Commander, Scroll to the 'Error Menu' item using the down arrow key, then press the right arrow key.
5. The following table will be displayed indicating the error count.



**Table 2**

ERROR MENU			
E02	OCP	(0, 255)	0
E03	OVP	(0, 255)	0
E04	VSYNC	(0, 255)	0
E05	IKR	(0, 255)	0
E06	IIC	(0, 255)	0
E07	NVM	(0, 255)	0
E08	HPROT	(0, 255)	0
E09	TUNER	(0, 255)	0
E10	SOUNDP	(0, 255)	0
E11	-	(0, 255)	0
E12	SCANRATE	(0, 255)	0
E13	DAC	(0, 255)	0
E14	BACKEND	(0, 255)	0
E15	DYN CON	(0, 255)	0
E16	PIP	(0, 255)	0
WORKING TIME			
HOURS			14
MINUTES			7


**Note:** To clear the error count data press '80' on the Remote commander.

The operating instructions mentioned here are partial abstracts from the 'Operating Instruction Manual'. The page numbers of the 'Operating Instruction Manual' remain as in the manual.

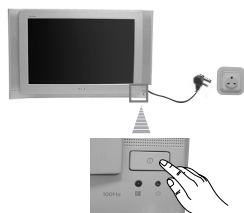
## Switching On the TV and Automatically Tuning



- 1** The first time you switch on your TV, a sequence of menu screens appear on the TV enabling you to: 1) choose the language of the menu screen, 2) adjust the picture slant, 3) assign an ID to your remote control, 4) search and store all available channels (TV Broadcast) and 5) change the order in which the channels (TV Broadcast) appear on the screen.
- However, if you need to change any of these settings at a later date, you can do that by selecting the appropriate option in the  (Set Up menu) or by pressing the Auto Start Up Button  on the TV set.

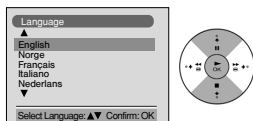
- 1** Connect the TV plug to the mains socket (220-240V AC, 50Hz)

The first time that the TV set is connected, it is usually turned on. If the TV is off, press the  on/off button on the TV set to turn on the TV.





The first time you switch on the TV, a **Language** menu displays automatically on the TV screen.

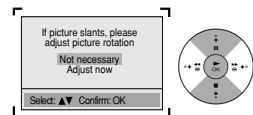


- 2** Press the  or  button on the remote control to select the language, then press the **OK** button to confirm your selection. From now on all the menus will appear in the selected language.




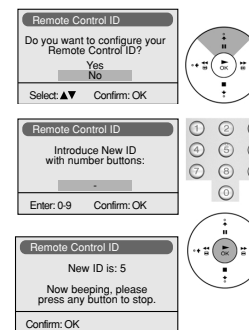
- 3** Because of the earth's magnetism, the picture might slant. The **Picture Rotation** menu allows you to correct the picture slant if it is necessary.

- a)** If it is not necessary, press **OK** to select **Not necessary**.
- b)** If it is necessary, press  or  to select **Adjust now**, then press **OK** and correct any slant of the picture between -5 and +5 by pressing  or . Finally press **OK** to store.



- 4** You can assign an ID (number) to your Remote Control to avoid interference from other locators when you press the Remote Control Locator button on the TV set.

- a)** If you do not want to configure it, press **OK** to select **No**.
- b)** If you want to configure it press  to select **Yes**. Press **OK**. Next press one of the number buttons (0-9) and press **OK** to store.

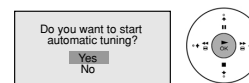


- i** The remote control beeps. Press **OK** to stop beeping.

- A** ID should be assigned anytime the batteries of the remote control will be replaced.



Finally press **OK** to continue the process.

- 5** The Auto Tuning menu appears on the screen. Press the **OK** button to select **Yes**.

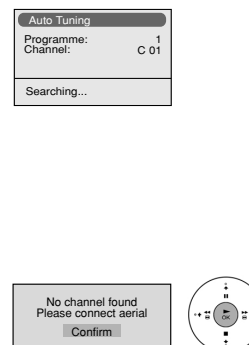


- 6** The TV starts to automatically search and store all available broadcast channels for you.

- A** This procedure could take some minutes. Please be patient and do not press any buttons, otherwise automatic tuning will not be completed.


- i** In some countries the TV Broadcaster installs the channels automatically (ACI system). In this case, the TV Broadcaster sends a menu in which you can select your city by pressing the  or  button and **OK** to store the channels.

- A** If no channels were found during the auto tuning process then a new menu appears automatically on the screen asking you to connect the aerial. Please connect the aerial (see page 6) and press **OK**. The auto tuning process will start again.






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
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**7**  After all available channels are captured and stored, the **Programme Sorting** menu automatically appears on the screen enabling you to change the order in which the channels appear on the screen.

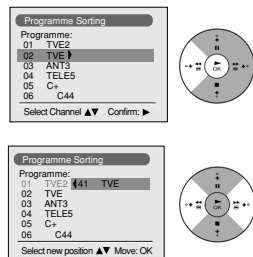
a) If you wish to keep the broadcast channels in the tuned order, go to step 8.

b) If you wish to store the channels in a different order:

1 Press the  or  button to select the programme number with the channel (TV Broadcast) you wish to rearrange, then press the  button.

2 Press the  or  button to select the new programme number position for your selected channel (TV Broadcast), then press **OK**.


3 Repeat steps b)1 and b)2 if you wish to change the order of the other channels.




**8** Press the **MENU** button to remove the menu from the screen.



GB



 Your TV is now ready for use


## Introducing and Using the Menu System


 Your TV uses an on-screen menu system to guide you through the operations. Use the following buttons on the Remote Control to operate the menu system:





**1** Press the **MENU** button to switch the first level menu on.



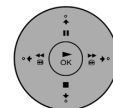
**2** To highlight the desired menu or option, press  or .

• To enter the selected menu or option, press .

• To return to the last menu or option, press .

• To alter the settings of your selected option, press  /  /  or .

• To confirm and store your selection, press **OK**.



**3** Press the **MENU** button to remove the menu from the screen.



## Menu Guide

Level 1






Level 2





Level 3 / Function



### PICTURE ADJUSTMENT

The "Picture Adjustment" menu allows you to alter the picture adjustments.

To do this: after selecting the item you want to alter press , then press repeatedly  /  /  or  to adjust it and finally press **OK** to store the new adjustment.

- This menu also allows you to customise the picture mode based on the programme you are watching:  
**Picture Mode**   **Live** (for live broadcast programmes, DVD and Digital Set Top Box receivers).  
 **Personal** (for individual settings).  
 **Movie** (for films).
- **Brightness, Colour and Sharpness** can only be altered if "Personal" mode is selected.
- **Hue** is only available for NTSC colour signal (e.g: USA video tapes).
- Select **Reset** and press **OK** to reset the picture to the factory preset levels.
- The **Noise Reduction** option is set to **AUTO** to automatically reduce the picture noise visible in the broadcast signal. To cancel this function, select "Off" instead of "AUTO".

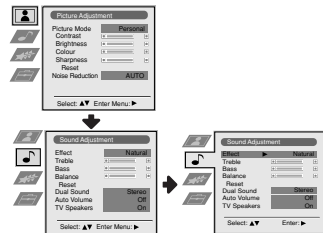
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## Level 1

## Level 2

## Level 3 / Function



### SOUND ADJUSTMENT

The "Sound Adjustment" menu allows you to alter the sound adjustments.

To do this: after selecting the item you want to alter, press **▶**. Then press repeatedly **▼** / **▲** / **◀** or **▶** to adjust it and finally press **OK** to store the new adjustment.

- Effect** **▶** **▼ Natural:** Enhances clarity, detail and presence of sound by using "BBE High Definition Sound system"\*.
- ▼ Dynamic:** "BBE High Definition Sound system"\* intensifies clarity and presence of sound for better intelligibility and musical realism.
- ▼ Dolby\*\*V:** Dolby Virtual, simulates the sound effect of "Dolby Surround Pro Logic".
- ▼ Off:** Flat response.
- Treble** **▶** **◀** Less **▶** More
- Bass** **▶** **◀** Less **▶** More
- Balance** **▶** **◀** Left **▶** Right
- Reset** **OK** Resets the sound to the factory preset levels.
- Dual Sound** **▶** • For a stereo broadcast:  
**▼ Mono.**  
**▼ Stereo.**  
 • For a bilingual broadcast:  
**▼ Mono** (for mono channel if available).  
**▼ A** (for channel 1).  
**▼ B** (for channel 2).
- Auto Volume** **▶** **▼ Off:** volume level changes according to the broadcast signal.  
**▼ On:** volume level of the channels will stay the same, independent of the broadcast signal (e.g. in the case of advertisements).
- TV Speakers** **▶** **▼ On:** to listen to the TV from the set speakers.  
**▼ Off:** to listen to the TV from an external amplifier connected to the audio outputs on the rear of the TV set.

- If you are listening to the TV through headphones, the "Effect" option will automatically be switched to "Off".
- If you select "Dolby Virtual" on the "Effect" option, the "Auto Volume" option will automatically be switched to "Off" and vice versa.

**①** \* The "BBE High Definition Sound system" is manufactured by Sony Corporation under license from BBE Sound, Inc. It is covered by U.S. Patent No. 4,638,258 and No. 4,482,866. The word "BBE" and BBE Symbol are trademarks of BBE Sound, Inc.

\*\* This TV has been designed to create the "Dolby Surround" sound effect by simulating the sound of four speakers with two speakers, when the broadcast audio signal is Dolby Surround encoded. The sound effect can also be improved by connecting a suitable external amplifier (for details refer to "Connecting to external audio Equipment" on page 22).

\*\* Manufactured under license from Dolby Laboratories. "Dolby", "Pro Logic" and the double-D symbol **DD** are trademarks of Dolby Laboratories.

GB

## Teletext

**①** Teletext is an information service transmitted by most TV stations. The index page of the teletext service (usually page 100) gives you information on how to use the service. To operate teletext, use the remote control buttons as indicated below.

**⚠** Teletext errors may occur if you use a channel (TV Broadcast) with a weak signal.

### To switch on Teletext :

After selecting the TV channel which carries the teletext service you wish to view, press **⏏**.



### To select a Teletext page:

Input 3 digits for the page number, using the numbered buttons.

- If you make a mistake, retype the correct page number.
- If the counter on the screen continues searching, it is because the page is not available. If this is the case, input another page number

### To access the next or preceding page:

Press **PROG +** (**⏏**) or **PROG -** (**⏏**).

### To superimpose teletext on to the TV:

Whilst you are viewing teletext, press **⏏**. Press it again to cancel teletext mode.

### To freeze a teletext page:

Press **⏏** / **⏏**. Press it again to cancel the freeze.

### To reveal concealed information (e.g. answer to a quiz):

Press **⏏** / **⏏**. Press it again to conceal the information.

### To select a sub page:

A teletext page may consist of several sub pages. In this case the page number that appears on the upper left corner will change from white to green and one or more arrows will appear next to the page number. Repeatedly press the **◀** or **▶** buttons on the remote control to watch the desired sub page.

### To Switch Off Teletext:

Press **⏏**.

## Fastext

**①** Fastext service lets you access Teletext pages with one button push.

When you are in Teletext mode and Fastext is broadcast, a colour coded menu appears at the bottom of the teletext page. Press the appropriate coloured button (red, green, yellow or blue) to access the page corresponding to your menu choice.

continued...

## NexTVView\*


\*(depending on availability of service).

**i** NexTVView is an on-screen electronic programme guide, providing you with programme information for different broadcasters.





When looking for information you can search by theme (sports, art, etc...) or date.

### Displaying NexTVView

**1** Select a broadcast channel providing a NexTVView service. In this case the indication "NexTVView" is displayed as soon as data is available.

**2** Press the  button on the remote control to switch NexTVView on and off.

**3** To navigate through NexTVView:

- moving to right or left press  or .
- moving up or downwards, press  or .
- confirming a selection, press **OK**.

Icons for different themes (see the "Icons" key" section on next page)

Date

Programme list



Record:

**i** This function only works if you have connected a VCR which supports SmartLink and Timer Programming feature.

If you wish to record the selected programme, press the red button on the remote control.

Remind:

If you wish to be reminded when the selected programme is broadcasted, press the green button on the remote control. At the time that programme should be displayed a reminder message is displayed on the TV.

GB

## Remote Control Configuration for VCR/DVD

In its default condition this remote control will operate the basic functions of this Sony TV, Sony DVDs and most Sony VCRs. To control VCRs and DVDs of other manufacturers (and some Sony VCR models), please complete the following steps:

**i** Before you start, look up the 3 digit code for your brand of DVD or VCR from the list below. On those brands that have more than one code, enter the first code number.

**1** Press the Media Selector button on the remote control repeatedly until the required green light (VCR or DVD) is lit.

**A** If Media Selector is on TV position, code numbers will not be stored.

**2** Before the green light goes out, press and hold the yellow button for approximately 6 seconds until the green light starts flashing.

**3** Whilst the green light is flashing, enter all three digits of the code for your brand of VCR or DVD using the number buttons on the remote control.

**i** If your selected code is entered correctly, all three green lights will be lit momentarily.

**4** Turn on your VCR or DVD and check that the main functions work.

**A** • If your device is not working or some of the functions do not work please check that you entered the correct code set or try the next code listed against the brand.

• Your brand codes may be lost if weak batteries are not replaced within a few minutes. To reset your brand of DVD or VCR please repeat the above steps. A small label is added inside the battery door to allow you to record your brand codes.

• Not all brands are covered and not all models of every brand may be covered.



GB

### VCR Brand List

Brand	Code
SONY (VHS)	301, 302, 303, 308, 309
SONY (BETA)	303, 307, 310
SONY (DV)	304, 305, 306
AIWA	325, 331, 351
AKAI	326, 329, 330
DAEWOO	342, 343
GRUNDIG	358, 355, 360, 361, 320, 351
HITACHI	327, 333, 334
JVC	314, 315, 322, 344, 352, 353, 354, 348, 349
LG	332, 338
LOEWE	358, 355, 360, 361, 320, 351
MATSUI	356, 357
ORION	328
PANASONIC	321, 323
PHILIPS	311, 312, 313, 316, 317, 318, 358, 359
SAMSUNG	339, 340, 341, 345
SANYO	335, 336
SHARP	324
THOMSON	319, 350
TOSHIBA	337

### DVD Brand List

Brand	Code
SONY	001
AIWA	021
DENON	018, 027, 020, 002
GRUNDIG	009, 028, 023, 024, 016, 003
HITACHI	025, 026, 015, 004
JVC	006, 017
KENWOOD	008
LG	015, 014
LOEWE	009, 028, 023, 024, 016, 003
MATSUI	013, 016
ONKYO	022
PANASONIC	018, 027, 020, 002
PHILIPS	009, 028, 023, 024, 016, 003
PIONEER	004
SAMSUNG	011, 014
SANYO	007
SHARP	019, 027
THOMSON	012
TOSHIBA	003
YAMAHA	018, 027, 020, 002

continued...

Specifications

Sony Manufacturing Co, UK, hereby declares that this Colour TV is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.

TV system:

I

Colour system:

PAL  
SECAM, NTSC 3.58, 4.43 (only Video In)

Channel Coverage:

I: UHF B21-B69

Picture Tube:

Flat Display FD Trinitron  
WIDE: 28" (approx. 71 cm.  
measured diagonally)

Rear Terminals

1/ 1 21-pin scart connector (CENELEC standard) including audio/video input, RGB input, TV audio/video output.

2/ 2 21-pin Scart connector (CENELEC standard) including audio / video input, RGB input, monitor audio/video output.

3/ 3 21-pin Scart connector (CENELEC standard) including audio / video input, S video input, selectable audio / video output and Smartlink interface.

audio outputs (Left/Right) - phono jacks

Side Terminals

4 S Video input – 4 pin DIN

4 video input – phono jack

4 audio input – phono jacks

headphones jack

Sound Output:

2 x 20 W (music power)

2 x 10 W (RMS)

Woofer:

30 W (music power)

15 W (RMS)

Power Consumption:

125 W

Standby Power

Consumption:

0.3 W

**Dimensions (w x h x d) :**  
approx. 797 x 519 x 523 mm.

Weight:

approx. 49 Kg.

Remote Control Locator coverage:

up to 10 m. in open field  
 The optimum distance is up to approximately 10 meters without interference. However, the distance may vary according to the surroundings and environment.

Even within the signal reception area, there are some spots (dead spot) where the RF signal can not be received. This characteristics is inherent to RF signals, and does not indicate malfunction.

Remote Control Locator

Frequency:

434 MHz (ISM band).

The frequency of your Remote Control Locator may be used by other devices (e.g. electric garage door). If the use of the Remote Control Locator causes interferences with any other device(s) please contact your nearest Sony Service Centre.

Accessories supplied:

1 Remote Control (RM-937)

3 Batteries (IEC designated, AA size)

Other features:

- 100 Hz picture, Digital Plus.
- Teletext, Fasttext, TOPtext (250 page TEXT memory).
- Sleep Timer.
- Smartlink (direct link between your TV set and a compatible VCR. For more information on Smartlink, please refer to the Instruction Manual of your VCR).
- Dolby Virtual.
- BBE.
- PIP.
- Auto Format.
- ACI (Auto Channel Installation).
- Remote Control Locator.
- Halogen free flame retardant used in cabinets.

Troubleshooting

Here are some simple solutions to problems which may affect the picture and sound.

Problem	Solution
No picture (screen is dark) and no sound.	<ul style="list-style-type: none"><li>• Check the aerial connection.</li><li>• Plug the TV in and press the  button on the front of the TV.</li><li>• If the standby indicator  is on, press <b>TV I/O</b> button on the remote control.</li></ul>
Poor or no picture (screen is dark), but good sound.	<ul style="list-style-type: none"><li>• Using the menu system, select the "Picture Adjustment" menu and select "Reset" to return to the factory settings.</li></ul>
No picture or no menu information from equipment connected to the Scart connector.	<ul style="list-style-type: none"><li>• Check that the optional equipment is on and press the  button repeatedly on the remote control until the correct input symbol is displayed on the screen.</li></ul>
Good picture, no sound.	<ul style="list-style-type: none"><li>• Press the  + button on the remote control.</li><li>• Check that "TV Speakers" is "On" in the "Sound Adjustment" menu.</li><li>• Check that headphones are not connected.</li></ul>
No colour on colour programmes.	<ul style="list-style-type: none"><li>• Using the menu system, select the "Picture Adjustment" menu and select "Reset" to return to factory settings.</li></ul>
Distorted picture when changing programmes or selecting teletext.	<ul style="list-style-type: none"><li>• Turn off any equipment connected to the Scart connector on the rear of the TV.</li></ul>
Distorted picture when pressing the Remote Control Locator button.	<ul style="list-style-type: none"><li>• This is not a malfunction. It could be caused because some broadcast TV uses the same or close frequency as the remote control locator. This problem will disappear when you stop pressing the button.</li></ul>
Picture slanted	<ul style="list-style-type: none"><li>• Using the menu system, select the "Picture Rotation" option in the "Detail Set Up" menu to correct the picture slant.</li></ul>
Noisy picture when viewing a TV channel.	<ul style="list-style-type: none"><li>• Using the menu system, select the "Manual Programme Preset" menu and adjust Fine Tuning (AFT) to obtain better picture reception.</li><li>• Using the menu system, select the "Noise Reduction" option in the "Picture Adjustment" menu and select "Auto" to reduce the noise in the picture.</li></ul>
<ul style="list-style-type: none"><li>• The remote control beeps even you have not pressed the remote control locator button or on the contrary,</li><li>• When you press the remote control locator button, the remote control does not beep.</li></ul>	<ul style="list-style-type: none"><li>• Using the menu system, assign an ID (number) to your remote control. (See "Remote Control ID" on page 17).</li><li>• Replace the batteries of the remote control and assign again an ID (number) to your remote control. (See "Remote Control ID" on page 17).</li></ul>
Remote control does not function.	<ul style="list-style-type: none"><li>• Check that the Media Selector on the remote control is set to the device you are using (VCR, TV or DVD).</li><li>• If the remote control does not operate the VCR or DVD even when the Media Selector has been set correctly. Enter the necessary code set as explained on "Remote Control Configuration for VCR/DVD" chapter of this instruction manual.</li><li>• Replace the batteries.</li></ul>
The standby indicator  on the TV flashes.	<ul style="list-style-type: none"><li>• Contact your nearest Sony service centre.</li></ul>

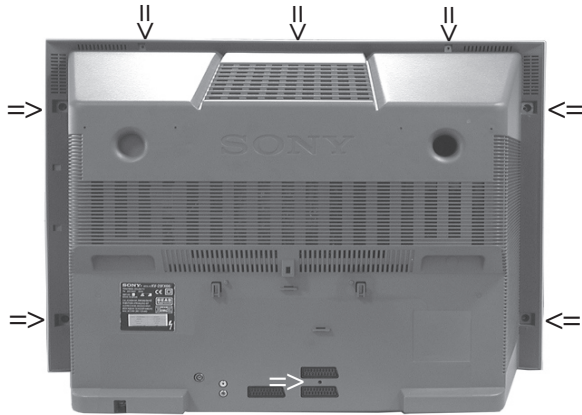
Design and specifications are subject to change without notice.

100% Recycled Paper - Totally Chlorine Free

If you continue to experience problems, have your TV serviced by qualified personnel. Never open the casing yourself.

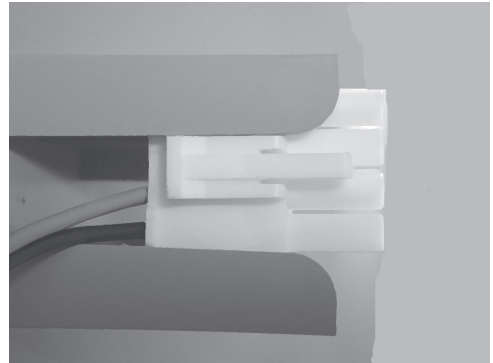
## SECTION 2 DISASSEMBLY

### 2-1. Rear Cover Removal



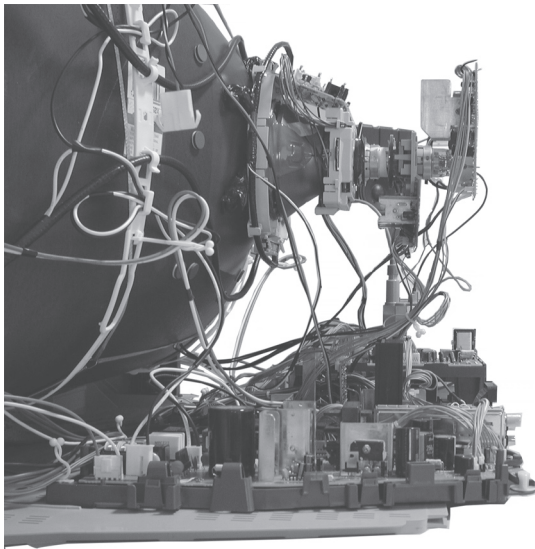
Remove the rear cover fixing screws indicated. Take care when removing the rear cover not to damage the speaker cables [Disconnect the speaker connector] as speakers are fitted inside the rear cover.

### 2-2. Speaker Connector Disconnection

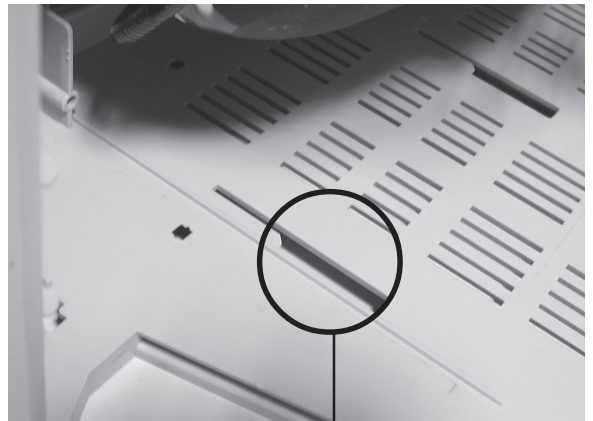


Before completely removing the rear cover disconnect the speaker connector which is located on the inside.

### 2-3. Chassis Removal and Refitting



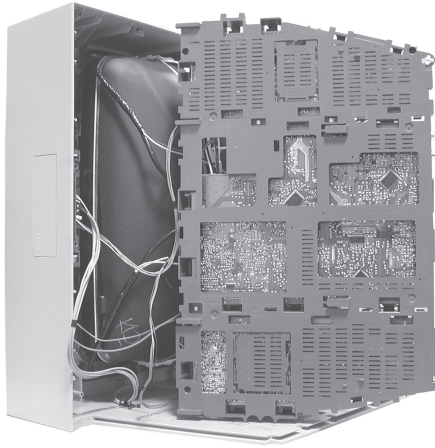
To remove lift the main bracket rear slightly and slide the chassis away from the beznet. Ensure that the interconnecting leads are released from their purse locks to prevent damage being caused.



When refitting the chassis ensure that the main bracket is located in the beznet guide slots before sliding the chassis forwards. Refit the interconnecting leads in their respective purse locks.

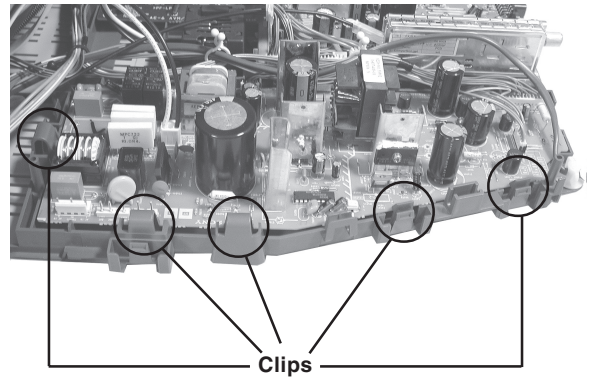


#### 2-4. Service Position



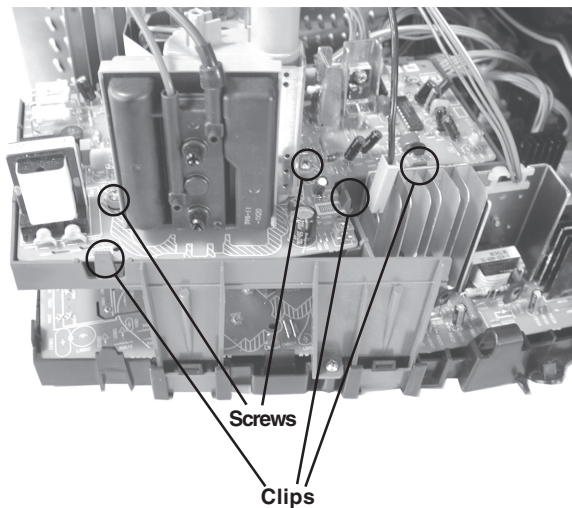
Position the chassis as indicated to access the solder side. To gain access to the underside of the boards follow the instructions on page 16. [Removal and Replacement of the main bracket bottom plates ].

#### 2-5. G Board Removal



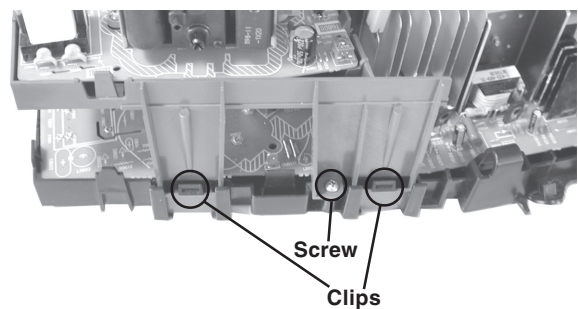
To remove the G Board release the clips circled and ease the board gently away from the support bracket.

#### 2-6. D2 Board Removal



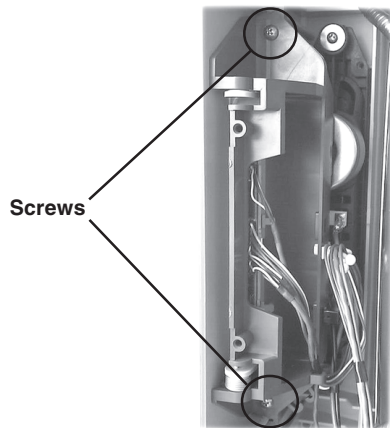
To remove the D2 board remove the two screws circled, release the clips circled and ease the board gently away from the support bracket.

#### 2-7. D Board Removal



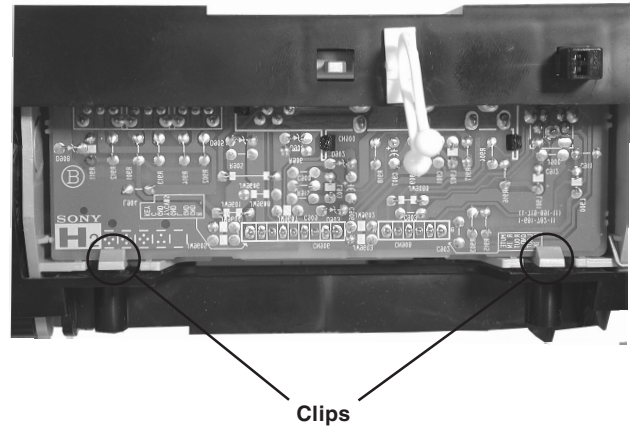
To remove the D board first remove the D2 bracket by removing the two screws (one on each side of the bracket) and releasing the four clips (two on each side of the bracket). The D board can then be removed using the same method as the G board.

## 2-8. Side Control Module Removal



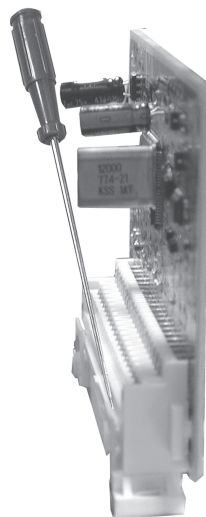
Remove the two screws fixing the user control module to the side of the set. The control module can then be removed by sliding it towards the rear of the set allowing access to the H2 Board.

## 2-9. H2 Board Removal



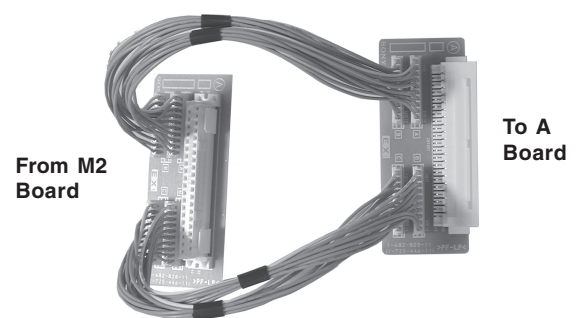
To remove the H2 Board release the two clips circled and ease the board gently away from the support bracket.

## 2-10. M2 Board Removal



To remove the M2 Board gently release the two clips with a screwdriver and remove the board from its socket vertically.

## 2-11. Service Connector for M2 Board



Extender Board Assembly A-1642-293-A

If the M2 Board needs to be removed for testing when the chassis is placed in its service position, it would be necessary to use an extender board and extension cable as indicated above.

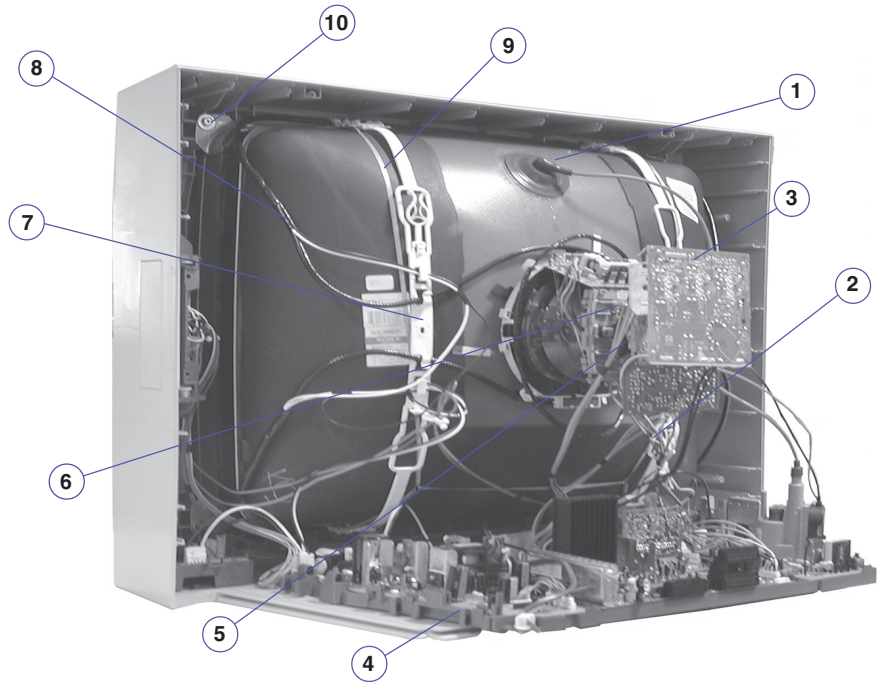
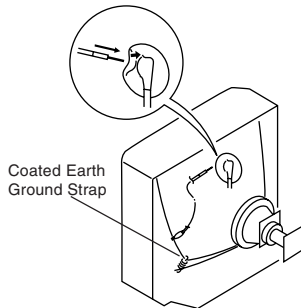
The Extender board and extension cable are available as a service part by ordering the part number as indicated.



## 2-12. Picture Tube Removal

### WARNING: BEFORE REMOVING THE ANODE CAP

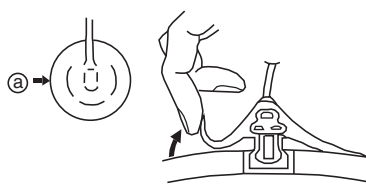
High voltage remains in the CRT even after the power is disconnected. To avoid electric shock, discharge CRT **before** attempting to remove the anode cap. Short between anode and CRT coated earth ground strap.



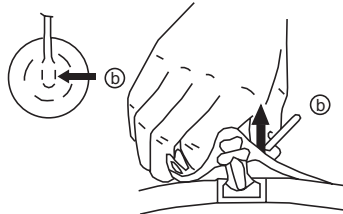
1. Discharge the anode of the CRT and remove the anode cap.
2. Unplug all interconnecting leads from the Deflection yoke, neck assy, degaussing coils and CRT grounding strap.
3. Remove the C Board from the CRT.
4. Remove the chassis assembly.
5. Loosen the Neck assembly fixing screw and remove.
6. Loosen the Deflection yoke fixing screw and remove.
7. Place the set with the CRT face down on a cushion and remove the Degaussing Coil holders.
8. Remove the Degaussing Coils.
9. Remove the CRT grounding strap and spring tentioners.
10. Unscrew the four CRT fixing screws [ located on each CRT corner ] and remove the CRT.  
[Take care not to handle the CRT by the neck.]

### Removal of the Anode-Cap

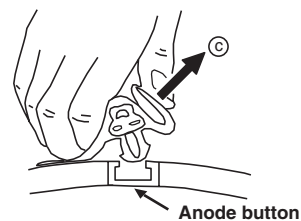
#### \* REMOVING PROCEDURES.



- ① Turn up one side of the rubber cap in the direction indicated by the arrow (a)



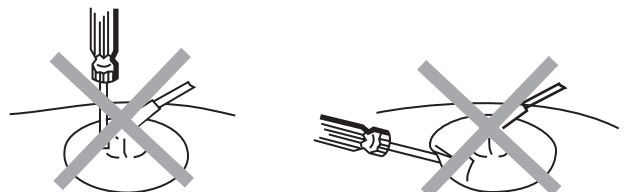
- ② Using a thumb pull up the rubber cap firmly in the direction indicated by the arrow (b)



- ③ When one side of the rubber cap is separated from the anode button, the anode-cap can be removed by turning up the rubber cap and pulling it up in the direction of the arrow (c)

#### How to handle the Anode-Cap

1. To prevent damaging the surface of the anode-cap do not use sharp materials.
2. Do not apply too great a pressure on the rubber, as this may cause damage to the anode connector.
3. A metal fitting called a shatter hook terminal is fitted inside the rubber cap.
4. Do not turn the rubber foot over excessively, this may cause damage if the shatter hook sticks out.



## REMOVAL AND REPLACEMENT OF THE MAIN-BRACKET BOTTOM PLATES.

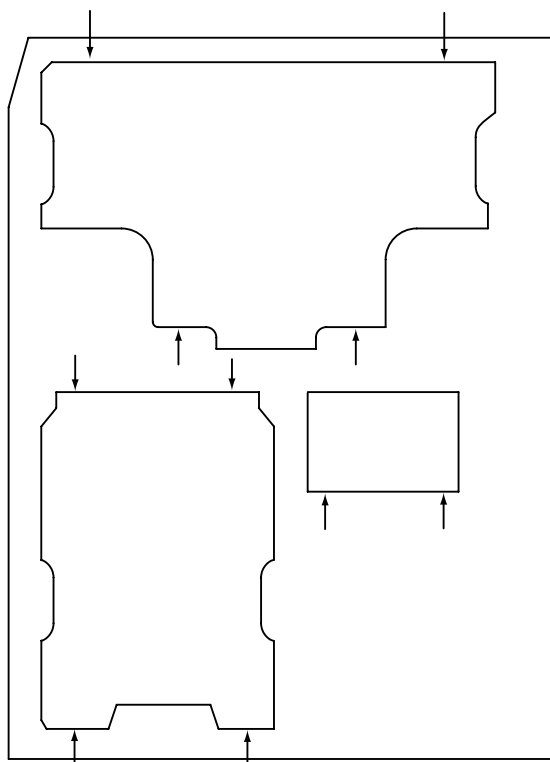
### (1) REMOVING THE PLATES

In the event of servicing being required to the solder side of the D Board printed wiring board, the bottom plates fitted to the main chassis bracket require to be removed.

This is performed by cutting the gates with a sharp wire cutter at the locations indicated by the arrows.

**Note :** There are 3 plates fitted to the main bracket and secured by 3 gates.

Only remove the necessary plate to gain access to the printed wiring board.

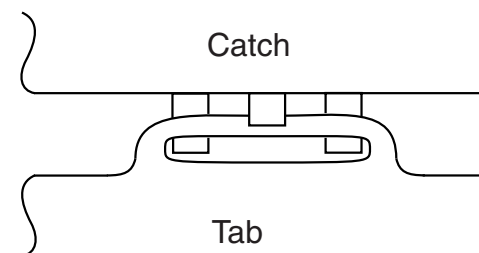


For safety reasons, on no account should the plates be removed and not refitted after servicing.

### (2) REFITTING THE PLATES

Because the plates differ in size it is important that the correct plates are refitted in their original location.

Please note that the plates need to be rotated 180 degrees from their cut position to allow the tabs to be fitted into their catch positions.



## SECTION 3 SET-UP ADJUSTMENTS

- When complete readjustment is necessary or a new picture tube is installed, carry out the following adjustments.
- Unless there are specific instructions to the contrary, carry out these adjustments with the rated power supply.
- Unless there are specific instructions to the contrary, set the controls and switches to the following settings :

Contrast ..... normal

Brightness ..... normal

**Carry out the adjustments in the following order :**

- 3-1. Beam Landing.
- 3-2. Convergence.
- 3-3. Focus.
- 3-4. White Balance.

**Note :** Test equipment required.

1. Color bar/pattern generator.
2. Degausser.
3. Oscilloscope.
4. Digital multimeter.

### 3-1. Beam Landing

**Preparation :**

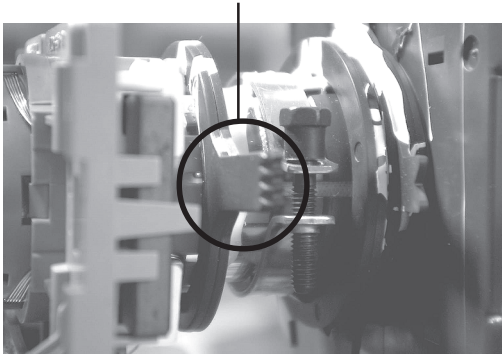
1. In order to reduce the influence of geomagnetism on the set's picture tube, face it in an easterly or westerly direction.
2. Switch on the TV set's power and degauss with a degausser.

#### (1) Adjustment of Correction Magnet for Y-Splitting Axis.

1. Input a crosshatch signal from the pattern generator.
2. Set the Picture control to minimum and confirm that the Brightness control is set to normal.
3. Position the neck assembly as indicated in Fig.3-2.
4. Loosen the deflection yoke fixing screw.
5. Move the deflection yoke as far forward as is possible.
6. Adjust the upper and lower pin symmetrically by opening or closing the Y-splitting axis correction magnets located on the neck assembly. [See Fig 3-3]
7. Return the deflection yoke to its original position and re-tighten its fixing screw.

**Fig.3-1**

**Y-splitting axis correction magnet**



**Caution :**

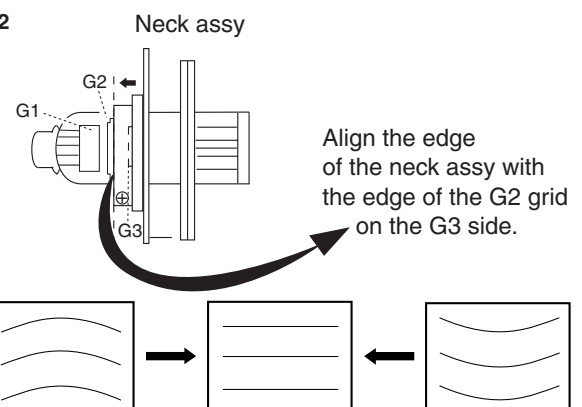
High voltages are present on the Deflection yoke terminals - take care when handling the Deflection yoke whilst carrying out adjustments.

#### (2) Landing

**Note :** Before carrying out the following adjustments adjust the magnets as indicated below [See Fig.3-4].

1. Input a crosshatch signal from the signal generator.
2. Rough-adjust the focus and horizontal convergence.
3. Switch from the crosshatch pattern to an all-red pattern.
4. Move the deflection yoke backwards and adjust with the purity magnet so that the red is at the centre and it aligns symmetrically [See Fig.3-5].
5. Move the deflection yoke forward to the point where the entire screen just becomes red [Mark its position].
6. Move the deflection yoke further forward until the screen just changes colour at the edges. [Mark its position]
7. Position the deflection yoke between the two marks indicated above.
8. Input a crosshatch pattern from the pattern generator and rotate the deflection yoke so that the horizontal lines are parallel with the top and bottom of the screen.
9. When the position of the deflection yoke has been determined, fasten it with its fixing screw.
10. Switch the pattern generator to green then blue and confirm the purity.
11. If the beam does not land correctly in all the corners of the screen, use disk magnets to correct it. [Confirm the corner landing for green and blue]

**Fig.3-2**



**Fig.3-3**

Fig.3-4

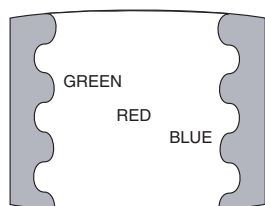
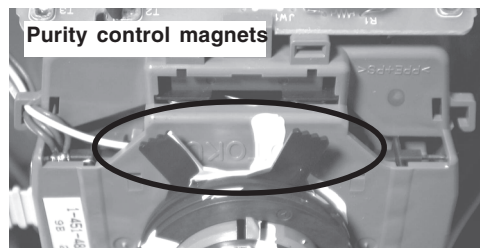
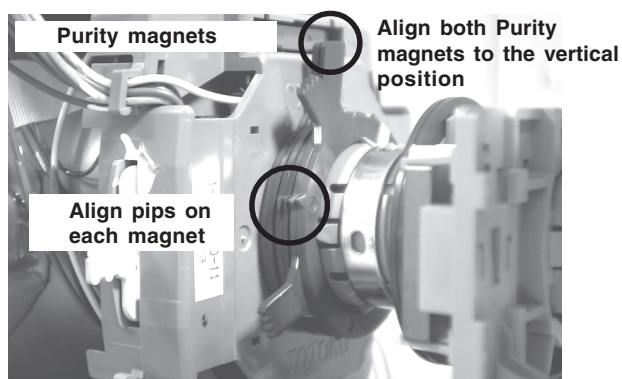
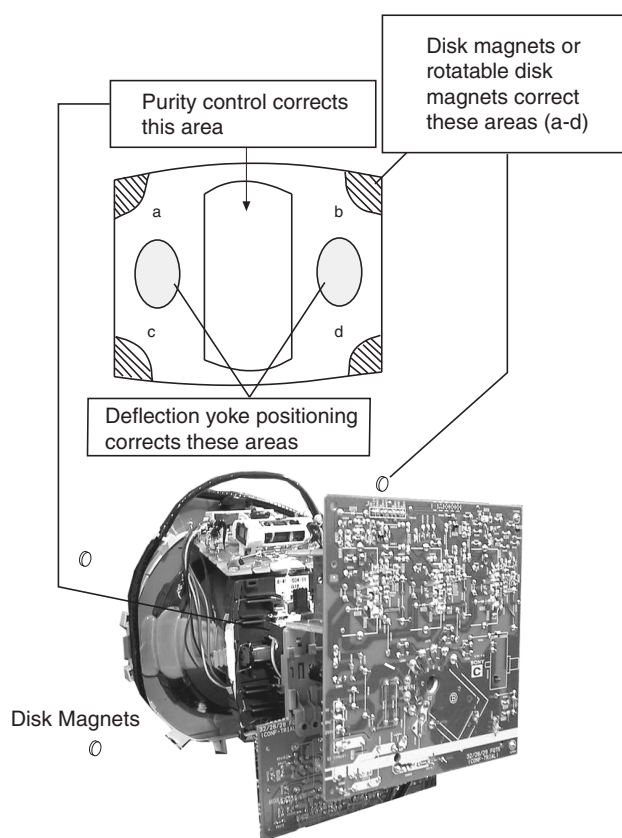


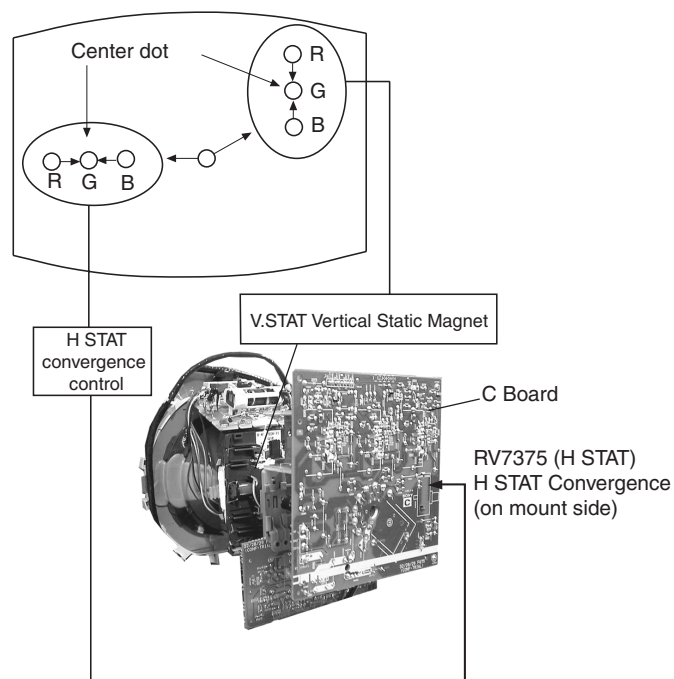
Fig.3-5



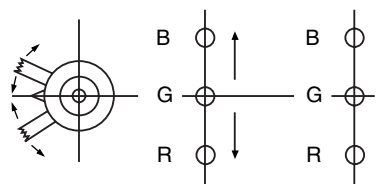
## 3-2. Convergence

### (1) Screen centre convergence [Static convergence]

1. Input a dot pattern signal from the pattern generator.
2. Normalize the picture setting.
3. [Moving vertically], adjust the V.STAT magnet so that the vertical red, green and blue dots coincide at the centre of the screen.



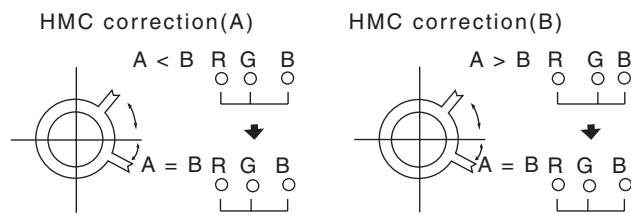
By opening or closing the V.STAT magnet, the red green and blue dots move in the direction indicated below.



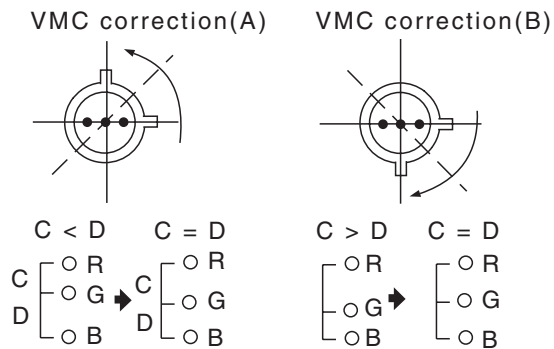
**Note:** Do not adjust the H.STAT by rotating the V.STAT magnets as this can affect the focus setting.

4. Correction for HMC [Horizontal mis-convergence] and VMC [Vertical mis-convergence] by using the BMC [Hexapole] magnet.

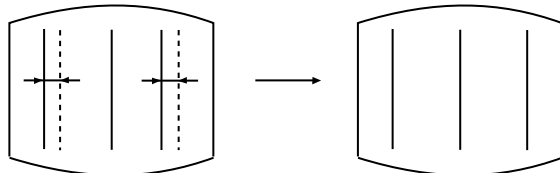
- a). HMC correction by BMC [Hexapole] magnet and movement of the electron beam.



- b). VMC correction by BMC [Hexapole] magnet and movement of the electron beam.

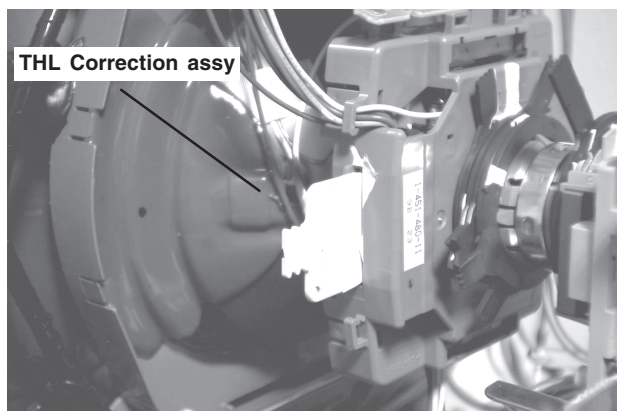


#### HAMP Adjustment

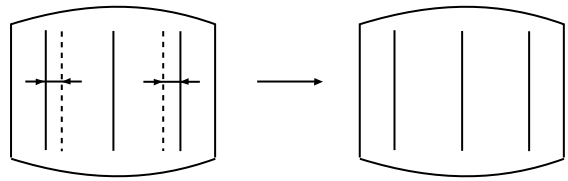


Adjust the HAMP using HAMPL and HAMPR registers in the Dynamic Convergence section of the service menu.

#### HTIL Adjustment



HTIL correction can be performed by adding a THL correction assembly to the Deflection yoke.



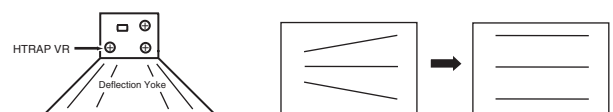
#### YCH Adjustment



#### TLV Adjustment



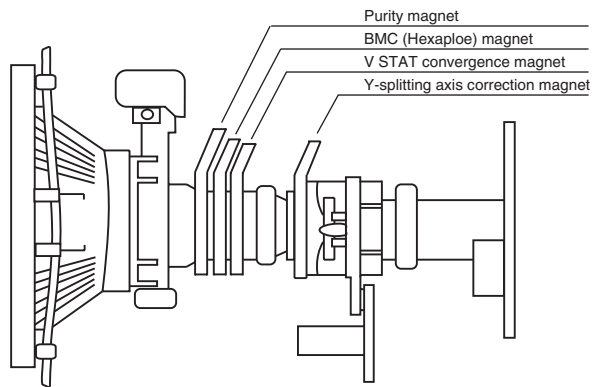
#### H-TRAP Adjustment



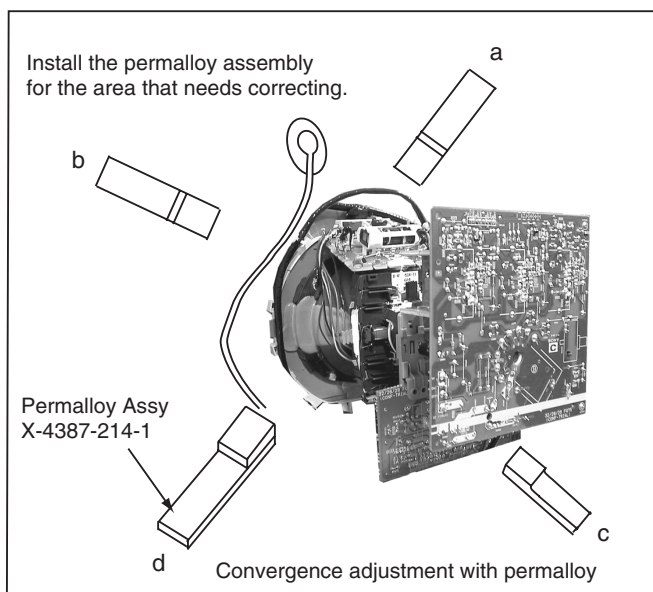
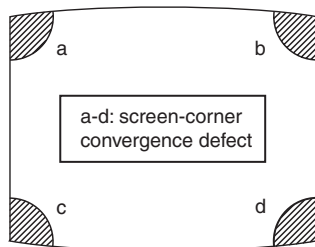
The H-TRAP should not be adjusted unless absolutely necessary as it affects the TLV settings.



## Layout of each control

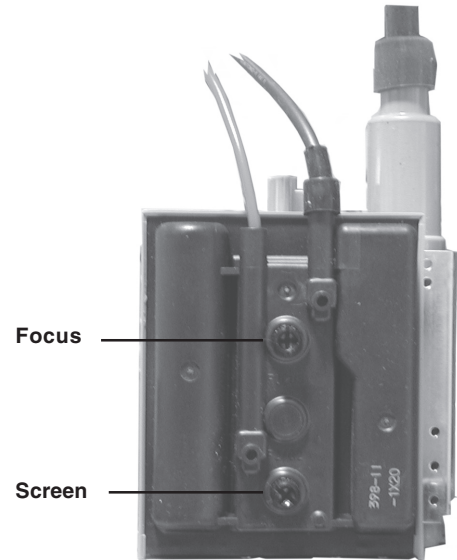


**Note :** If you are unable to adjust the corner convergence properly, this can be corrected with the use of permalloy magnets.



## 3-3. Focus Adjustment

1. Receive a television broadcast signal.
2. Normalize the picture setting.
3. Adjust the focus control located on the flyback transformer to obtain the best focus at the centre of the screen. Bring only the centre area of the screen into focus, the magenta-ringing appears on the screen. In this case, adjust the focus to optimize the screen uniformly.



## 3-4. Screen (G2), White Balance

[Adjustment in the service mode using the remote commander]

### G2 adjustment

1. Input a dot signal from the pattern generator.
2. Set the Picture, Brightness and Colour to minimum.
3. Apply 165V DC from an external power supply to the R, G and B cathodes of the CRT.
4. Whilst watching the picture, adjust the G2 control [SCREEN] located on the flyback transformer to the point just before the flyback return lines disappear.

### White balance adjustment for TV mode

1. Input an all-white signal from the pattern generator.
2. Program the Remote Commander for operation in Service Mode. [ See Page 21 ].
3. Enter into the 'Service Mode' by pressing 'VIDEO' button twice and 'MENU' on the Service Commander.
4. Select 'Service' from the on screen menu display and press 'Right Arrow'.
5. The 'Service' menu will appear on the screen.[See Page 21]
6. Set the 'Contrast' to MAX.
7. Set the 'R-Drive' to 50.
8. Adjust the 'G-Drive' and the 'B-Drive' so that the white balance becomes optimum.
9. Press the 'OK' button to write the data for each item.
10. Set the 'Contrast' to MIN.
11. Set the 'R-Cutoff' to 29.
12. Adjust the 'G-Cutoff', and the 'B-Cutoff' with the left and right buttons on the remote commander so that the white balance becomes optimum.
13. Press the 'OK' button to write the data for each item.



## SECTION 4 CIRCUIT ADJUSTMENTS

### 4-1. Electrical Adjustments


Service adjustments to this model can be performed using the supplied remote Commander RM-937.

#### Programming the Remote Commander for Operation in Service Mode

1. Press the VCR/TV/DVD button until the TV LED lights.
2. Press and hold the yellow button for approx. 5 seconds until the TV LED flashes quickly.
3. Press 99999. All three LED's should light. The remote commander is now set to Service Mode.
4. To return the remote commander to normal operation mode repeat steps 1. and 2. then press 00000. All three LED's should light. The remote commander is now set to normal mode.



#### Setting the TV into Service Mode

1. Program the remote commander for operation in Service Mode as described above.
2. Turn on the TV main power switch.
3. Press the video standby button  on the remote commander twice. 'TT \_' will appear in the upper right corner of the screen. Other status information will also be displayed.
4. Press 'MENU' on the remote commander to obtain the following menu on the screen.

```

Geometry
Panorama
Service
Scanrate
DAC
PiP
Sound
IF adjust
Error Menu

AE6BMW v0.16 (Mar '02')
Factory data FFh FFh
MSP Device : MSP3411G
    
```

5. Move to the corresponding adjustment item using the up or down arrow buttons on the Remote Commander.
6. Press the right arrow button to enter into the required menu item.
7. Press the 'Menu' button on the Remote Commander to quit the Service Mode when all adjustments have been completed.

#### Note :

- After carrying out the service adjustments, to prevent the customer accessing the 'Service Menu' switch the TV set OFF and then ON.

#### PANORAMA

RDPOSXM	(0, 511)	3
RDPOSYM	(0, 255)	10
BLANDEL	(0, 255)	0
BLANPOL	(0, 1)	0
BLANLEN	(0, 511)	0
YFRAMEM	(0, 15)	0
YBAGR	(0, 15)	0
HPANONM	(0, 1)	1
HSCPOSCM	(0, 4095)	2032
HSEG1HM	(0, 63)	3
HINCOM	(0, 511)	40
HSEG1LM	(0, 31)	0
HINC1M	(0, 511)	20
HSEG2HM	(0, 63)	6
HINC2M	(0, 511)	0
HSEG2LM	(0, 31)	0
HINC3M	(0, 511)	492
HSEG3HM	(0, 63)	9
HINC4M	(0, 511)	472
HSEG3LM	(0, 31)	0
HSEG4M	(0, 2047)	384
VPANONM	(0, 1)	1
VDOUBLEM	(0, 1)	0
VSCPOSCM	(0, 16383)	7619
VSEG1HM	(0, 31)	0
VINCOM	(0, 511)	0
VSEG1LM	(0, 31)	0
VINC1M	(0, 511)	0
VSEG2HM	(0, 31)	0
VINC2M	(0, 511)	0
VSEG2LM	(0, 31)	0
VINC3M	(0, 511)	0
VINC4M	(0, 511)	0
VSEG3M	(0, 1023)	0
VSEG4M	(0, 1023)	0
HORPOSM	(0, 2047)	0
HORWIDTHM	(0, 2047)	960
HORPOSG	(0, 2047)	29
HORWIDTHG	(0, 2047)	0
HORFRAMEG	(0, 15)	3
PRIOP	(0, 7)	3
PRIOC	(0, 7)	5
PRIOS	(0, 7)	6
PRIOF	(0, 7)	7
PRION	(0, 7)	4
PRIOG	(0, 7)	1

#### SERVICE

SUB COL	(0, 63)	Adj
SUB HUE	(0, 63)	31
SUB SHARP	(0, 63)	30
SUB BRIGHT	(0, 63)	13
SUB CONT	(0, 15)	12
R-DRIVE	(0, 63)	50
G-DRIVE	(0, 63)	Adj
B-DRIVE	(0, 63)	Adj
R CUTOFF	(0, 63)	28
G CUTOFF	(0, 63)	24
B CUTOFF	(0, 63)	46
Br TXT	(0, 15)	7
Br OSD	(0, 15)	10

## GEOMETRY

ABL TH	(0, 3)	0
ABL MODE	(0, 3)	0
P ABL	(0, 15)	15
V SIZE	(0, 63)	35
V POSITION	(0, 63)	33
V COMP	(0, 3)	1
V LIN	(0, 15)	7
S CORRECTION	(0, 15)	7
H SIZE	(0, 63)	44
PIN AMP	(0, 63)	32
HCOMP	(0, 3)	0
UP CORNERPIN	(0, 63)	29
M PIN	(0, 3)	2
LO CORNERPIN	(0, 63)	29
TRAPEZIUM	(0, 15)	2
H POSITION	(0, 63)	40
AFC BOW	(0, 15)	8
AFC ANGLE	(0, 15)	9
LEFT BLK	(0, 63)	34
RIGHT BLK	(0, 63)	17
V ASPECT	(0, 63)	47
AKBTIM1	(0, 3)	2
AKBTIM2	(0, 1)	0
IKR		1
HNG		0
VNG		0

## IF ADJUST

Automute	1
Audio Gain	0
L Gating	0

## DAC

CONFIG		00000000
MPIN CONT	(0, 255)	96
HLIN	(0, 255)	83
HTRAP	(0, 255)	127
ROT. COIL	(0, 255)	130
PHOCUS PH	(0, 255)	90

## SOUND

M-N	(0, 511)	200
M-D	(-128, -1)	-20
M-S	(+0, +127)	+20
S-M	(+0, +127)	+10
D-M	(-128, -1)	-10
N-M	(0, 1023)	496
BBE	(+0, +68)	+28
B1	(-96, +96)	+0
B2	(-96, +96)	+0
B3	(-96, +96)	+0
B4	(-96, +96)	+0
B5	(-96, +96)	+0
SW L	(-128, +0)	+0
SW F	(+5, +40)	+30
NICAM C AD		10001
NICAM Error	(0, 2047)	0
Stereo	(-128, +127)	+0

Status 0000000110

## ERROR MENU

E02	OCP	(0, 255)	0
E03	OVP	(0, 255)	0
E04	VSUNC	(0, 255)	0
E05	IKR	(0, 255)	0
E06	IIC	(0, 255)	0
E07	NVM	(0, 255)	0
E08	HPROT	(0, 255)	0
E09	TUNER	(0, 255)	0
E10	SOUNDP	(0, 255)	0
E11	-	(0, 255)	0
E12	SCANRATE	(0, 255)	0
E13	DAC	(0, 255)	0
E14	BACKEND	(0, 255)	0
E15	-	(0, 255)	0
E16	PIP	(0, 255)	0

## WORKING TIME

HOURS	14
MINUTES	7

## Sub Brightness Adjustment

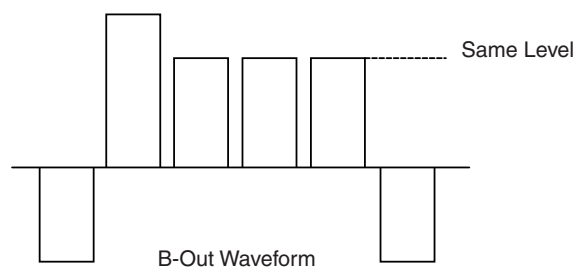
1. Input a Monoscope pattern.
2. Program the Remote Commander for operation in Service Mode. [ See Page 21 ].
3. Press 'VIDEO' 'VIDEO' 13 on the Remote Commander.
4. Adjust the 'Sub-Brightness' data so that there is barely a difference between the 0 IRE and 10 IRE signal levels.

## Sub Contrast Adjustment

1. Input a video signal that contains a small 100% white area on a black background.
2. Connect an digital voltmeter to Pin 10 of J7375 [C Board].
3. Program the Remote Commander for operation in Service Mode. [ See Page 21 ].
4. Adjust the Sub-Contrast [ Using 'VIDEO' 'VIDEO' '11' ] to obtain a voltage of 105 +/- 5V.

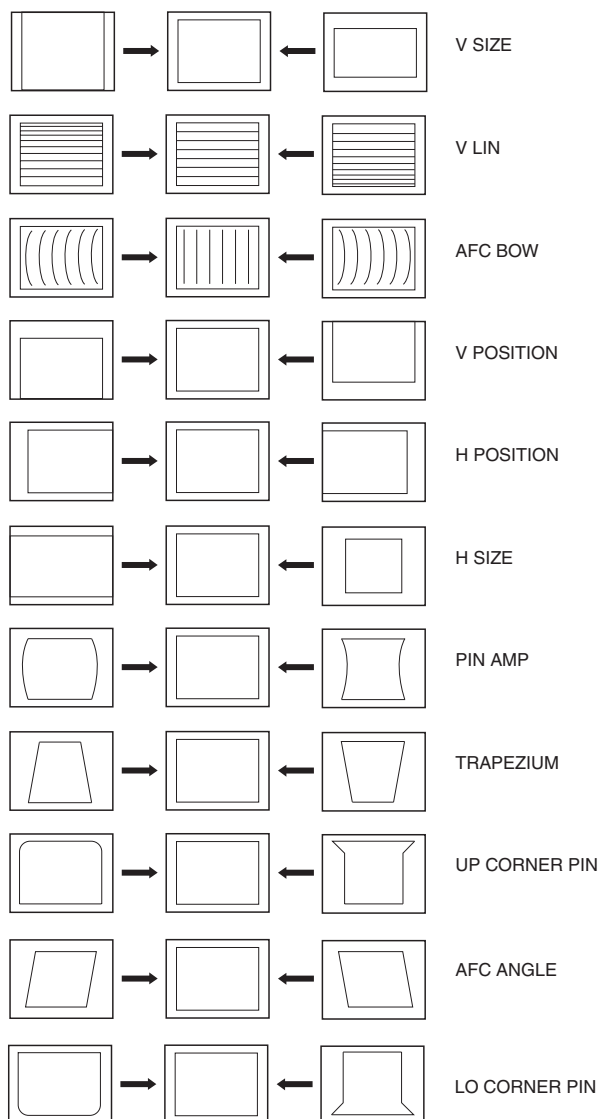
## Sub Colour Adjustment

1. Receive a PAL colour bar signal.
2. Connect an oscilloscope to Pin 6 of CN7001 [A Board].
3. Program the Remote Commander for operation in Service Mode. [ See Page 21 ].
4. Adjust the 'Sub Colour' [ Using 'VIDEO' 'VIDEO' '12' ] so that the Cyan, Magenta and Blue colour bars are of equal levels as indicated below.



## Deflection System Adjustment

1. Program the Remote Commander for operation in Service Mode. [ See Page 21 ] and enter into the 'Geometry' service menu.
2. Select and adjust each item in order to obtain the optimum image.



### GEOMETRY

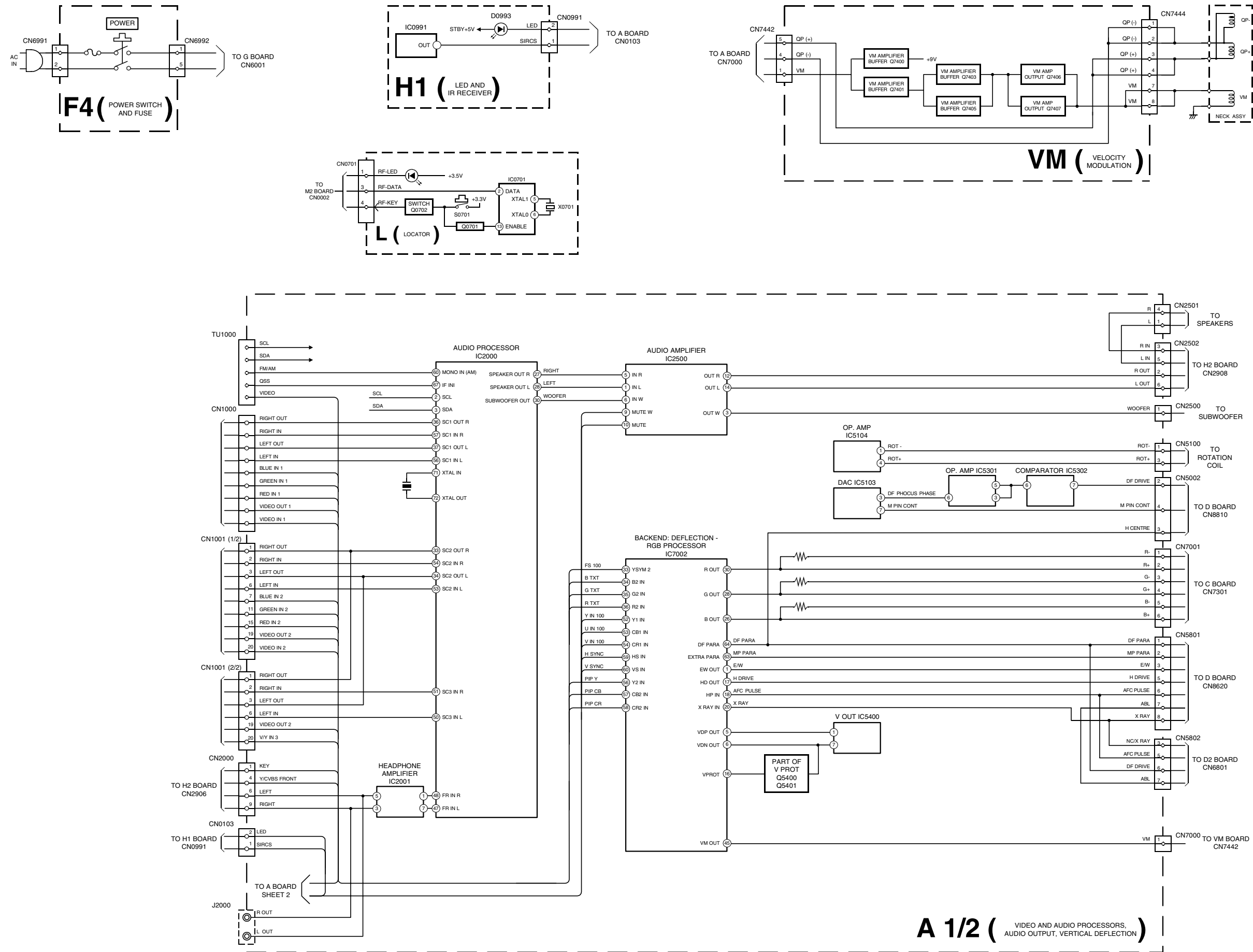
ABL TH	(0, 3)	0
ABL MODE	(0, 3)	0
P ABL	(0, 15)	15
V SIZE	(0, 63)	35
V POSITION	(0, 63)	33
V COMP	(0, 3)	1
V LIN	(0, 15)	7
S CORRECTION	(0, 15)	7
H SIZE	(0, 63)	44
PIN AMP	(0, 63)	32
HCOMP	(0, 3)	0
UP CORNERPIN	(0, 63)	29
M PIN	(0, 3)	2
LO CORNERPIN	(0, 63)	29
TRAPEZIUM	(0, 15)	2
H POSITION	(0, 63)	40
AFC BOW	(0, 15)	8
AFC ANGLE	(0, 15)	9
LEFT BLK	(0, 63)	34
RIGHT BLK	(0, 63)	17
V ASPECT	(0, 63)	47
AKBTIM1	(0, 3)	2
AKBTIM2	(0, 1)	0
IKR		1
HNG		0
VNG		0

## 4-2. TEST MODE 2:

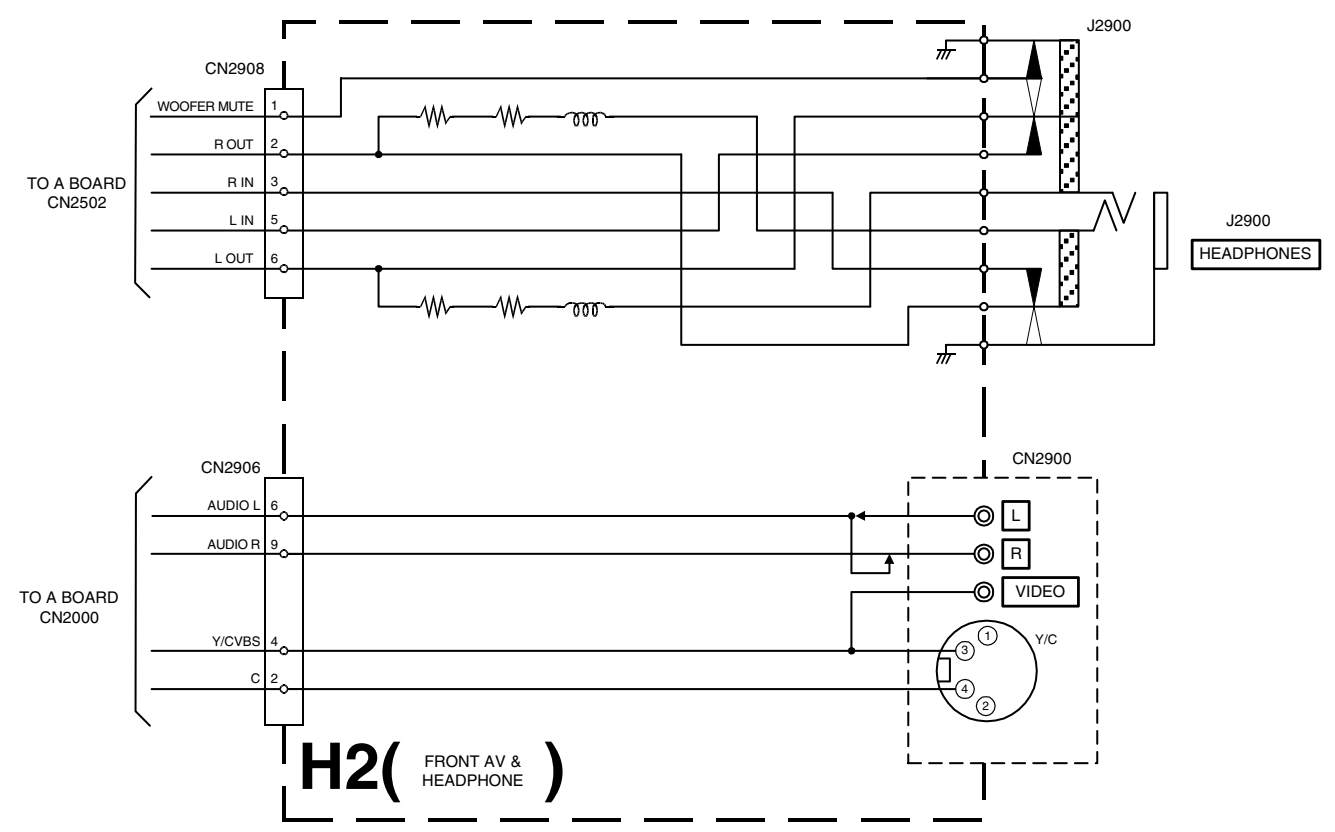
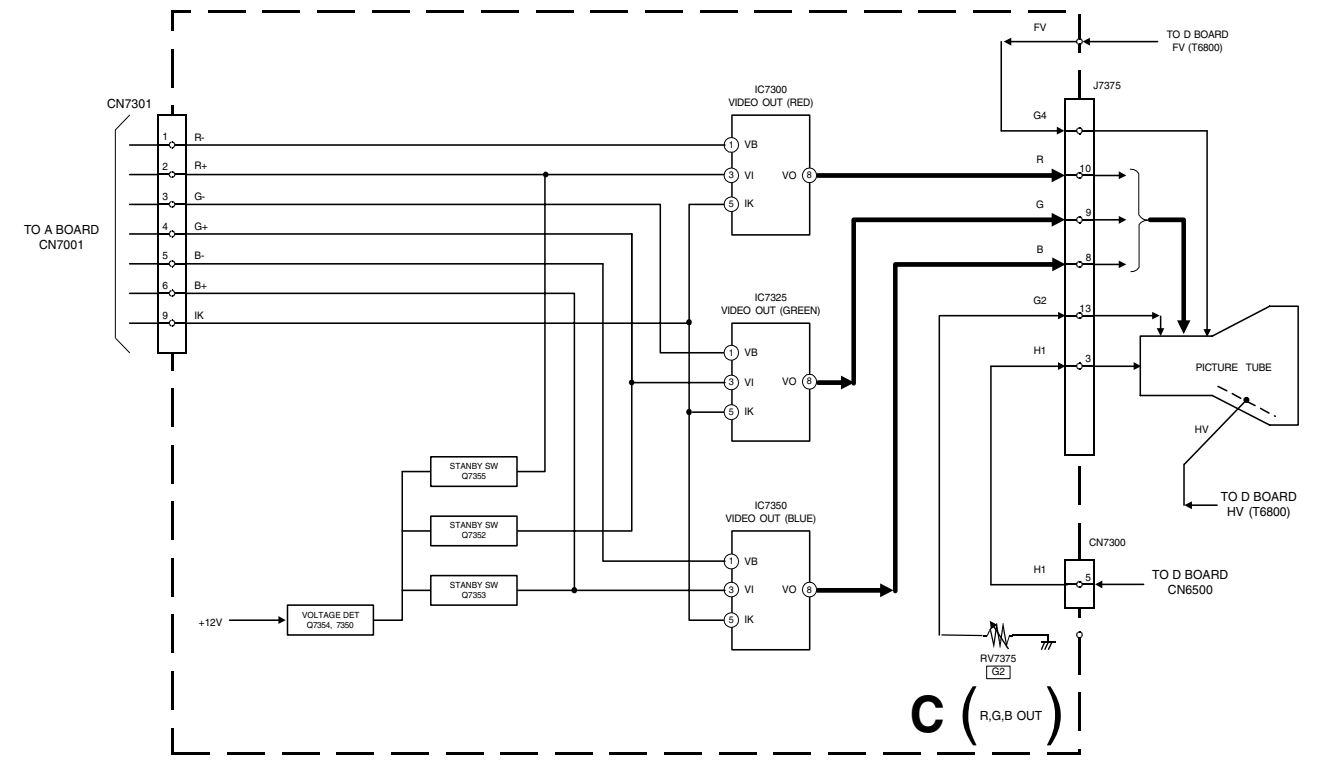
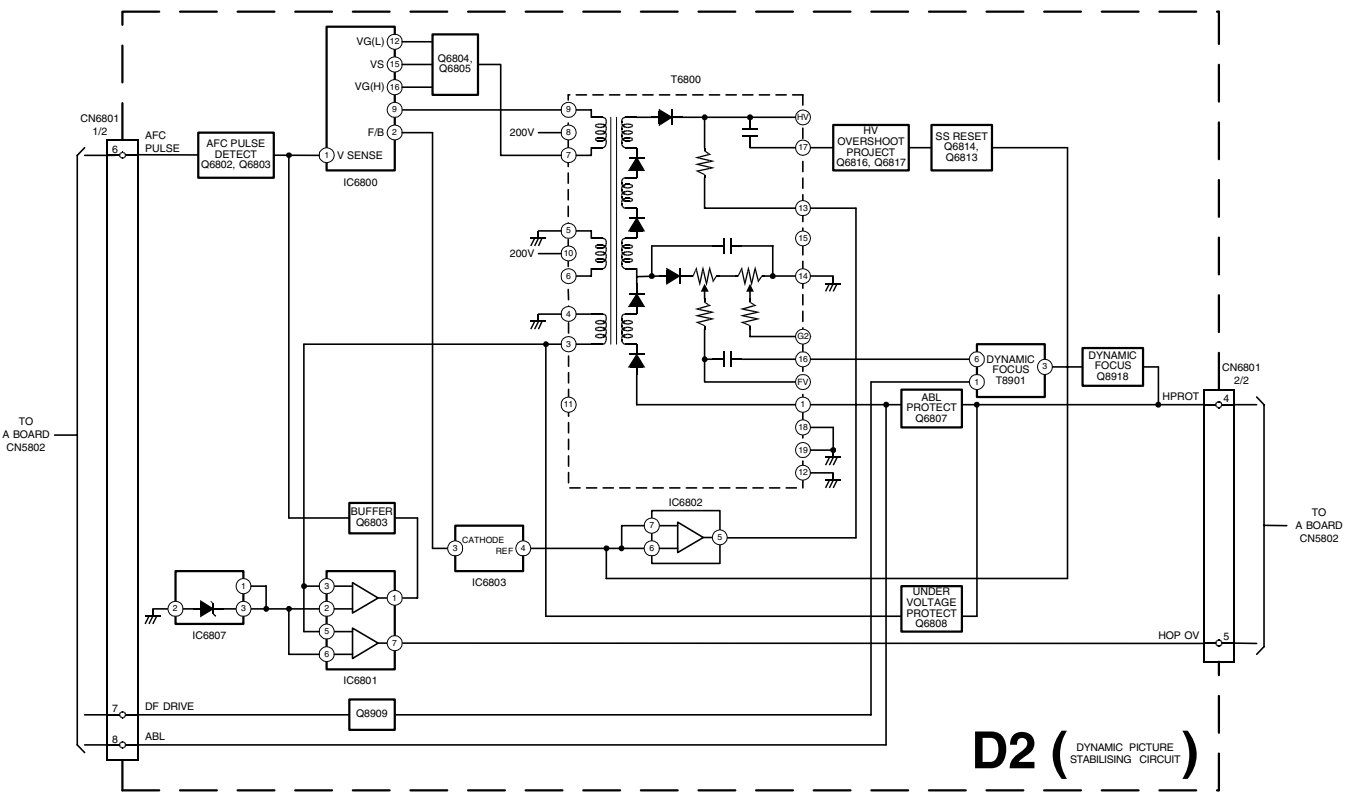
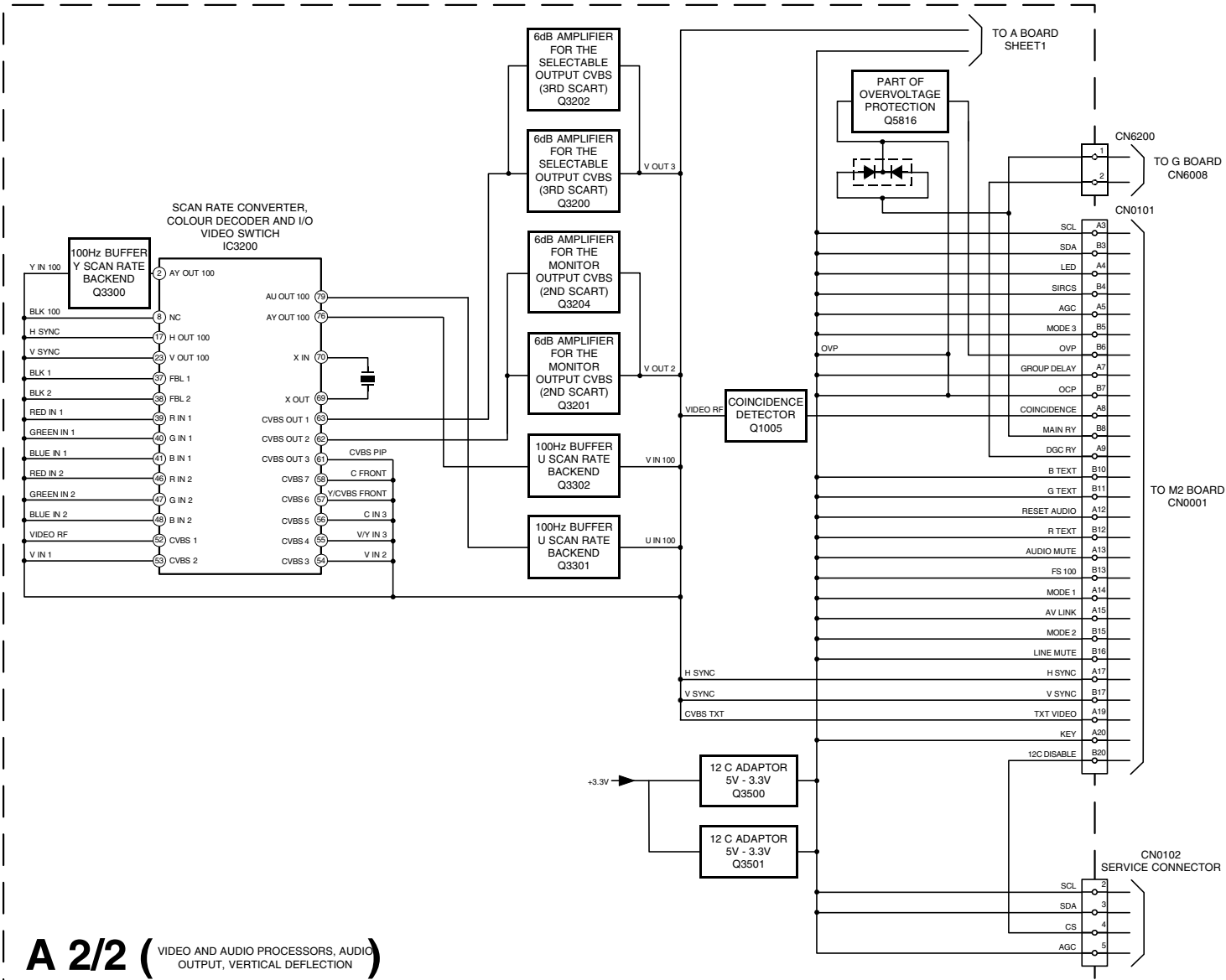
Test Mode 2 is available by rogramming the Remote Commander for operation in Service Mode [ As shown on Page 21 ] then pressing the 'VIDEO' button twice, OSD 'TT' appears. The functions described below are available by selecting the two numbers. To release the 'Test mode 2', press 00, 10, 20 ... twice or switch the TV set into Stand-by mode. In 'TT Menu' mode, it is possible to remove the Menu from the screen by pressing the Speaker Off button once. Pressing the Speaker OFF button a second time will cause the Menu to reappear. The function is kept even when the menu is not displayed on screen !!.

00	'TT' mode off
01	Picture maximum
02	Picture minimum
03	Set speaker/headphone Volume to 35%
04	Set speaker/headphone Volume to 50%
05	Set speaker/headphone Volume to 65%
06	Set speaker/headphone Volume to 80%
07	Ageing mode
08	Shipping Condition
11	Sub picture adjustment
12	Sub colour adjustment
13	Sub Brightness adjustment
14	Text H Position adjustment
15	Rotation Coil Test
16	Picture level 50%
19	Factory Mode Enable/Disable
21	Destination ADEKR
22	Destination BL
23	Destination ADEKR
24	Destination U
25	Destination ADEKR
26	Destination BL
27	Destination ADEKR
28	Destination ADEKR
31	Auto Shutoff Enable/Disable
36	Velocity Modulation (VM) OFF/ON test
41	Re-initialise NVM
43	Select Dual A sound
44	Select Dual B sound
45	Select Mono sound
46	Select Stereo sound
48	Set NVM as non virgin
49	Set NVM as virgin
53	FM Overmodulation Enable/Disable
55	Tuner selection (SONY/ALPS)
59	Select Model 3 Scarts + PIP or 2 Scarts
68	Enable/Disable X26 countermeasure (N problem)
73	Enable Zweiton D/K2 system (6.5/6.74)
74	Enable Zweiton D/K3 system (6.5/5.74)
78	Balance full right
79	Balance full left
87	Local keys test
99	Display Error and Working Time menu

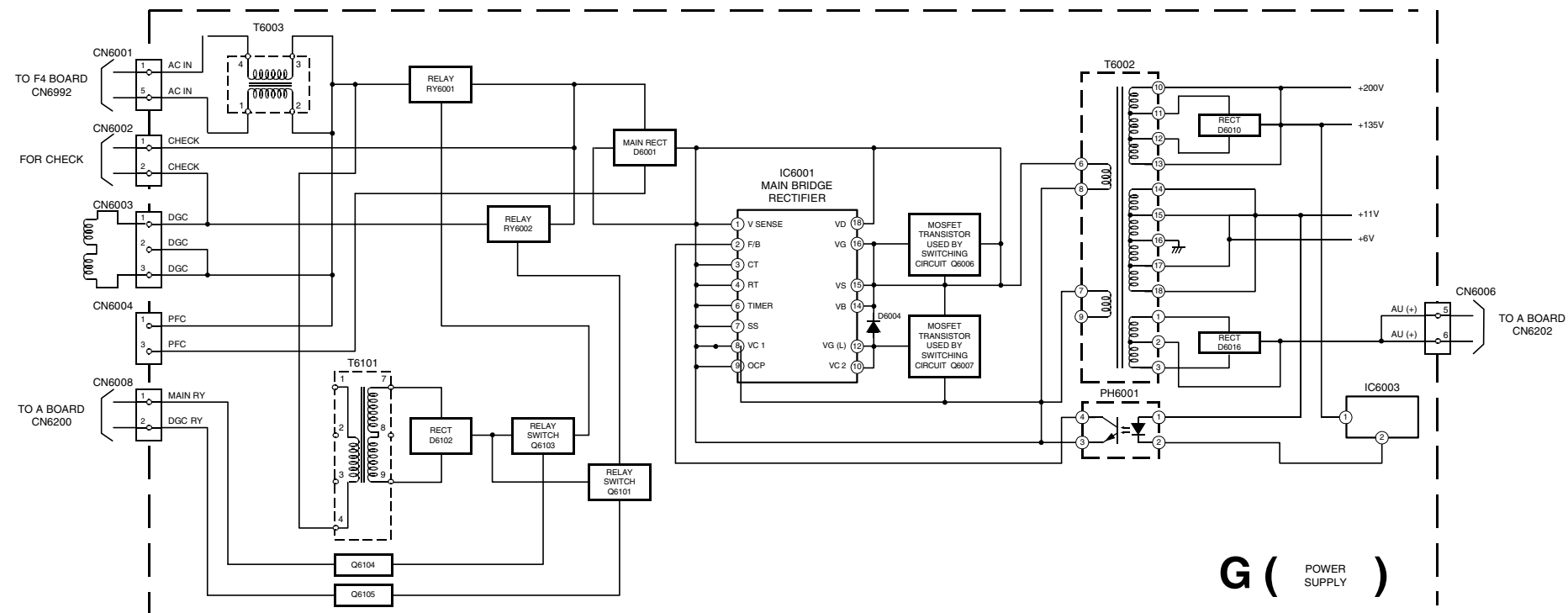
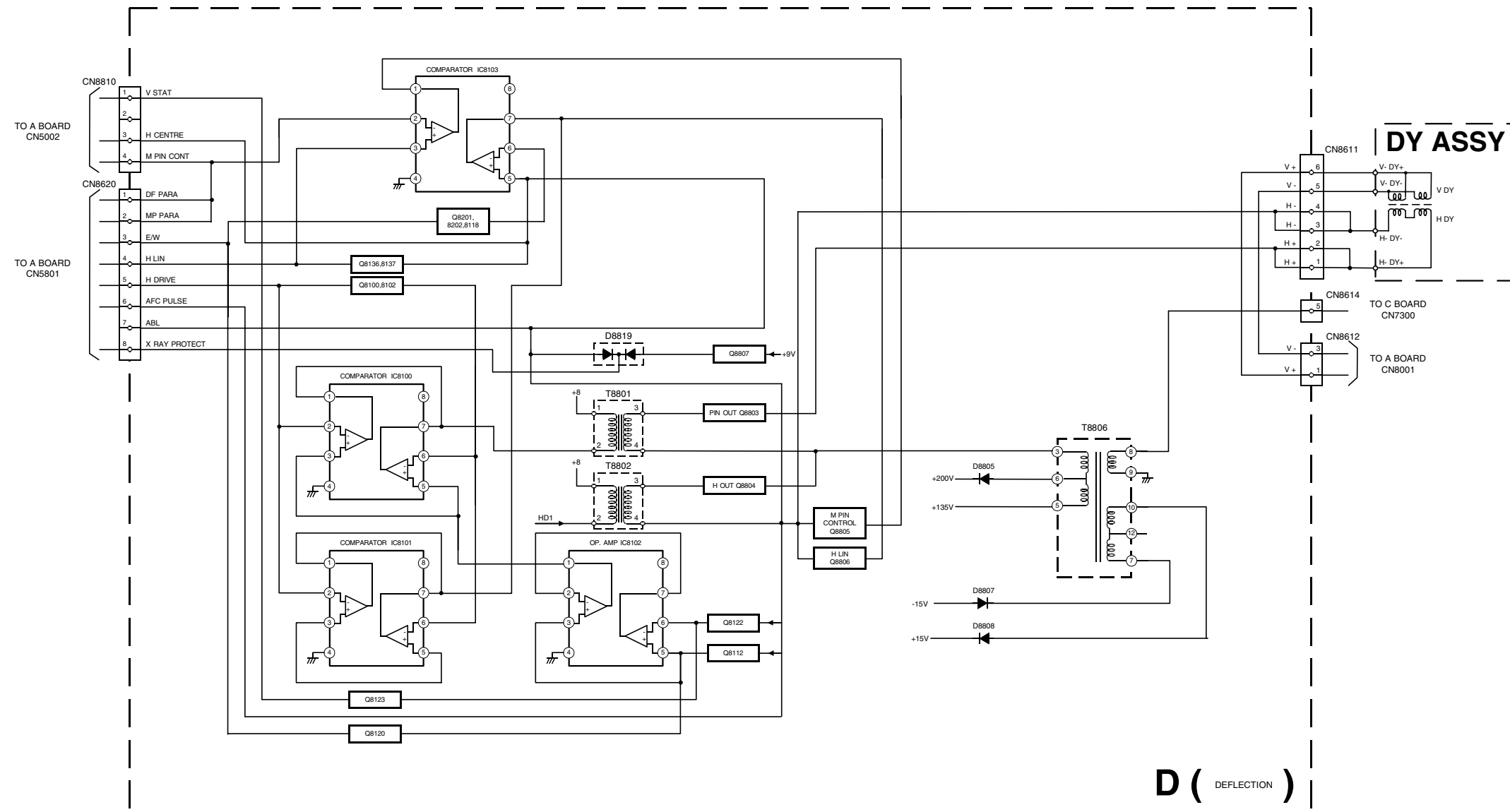
5-1. BLOCK DIAGRAMS (1)



5-1. BLOCK DIAGRAMS (2)

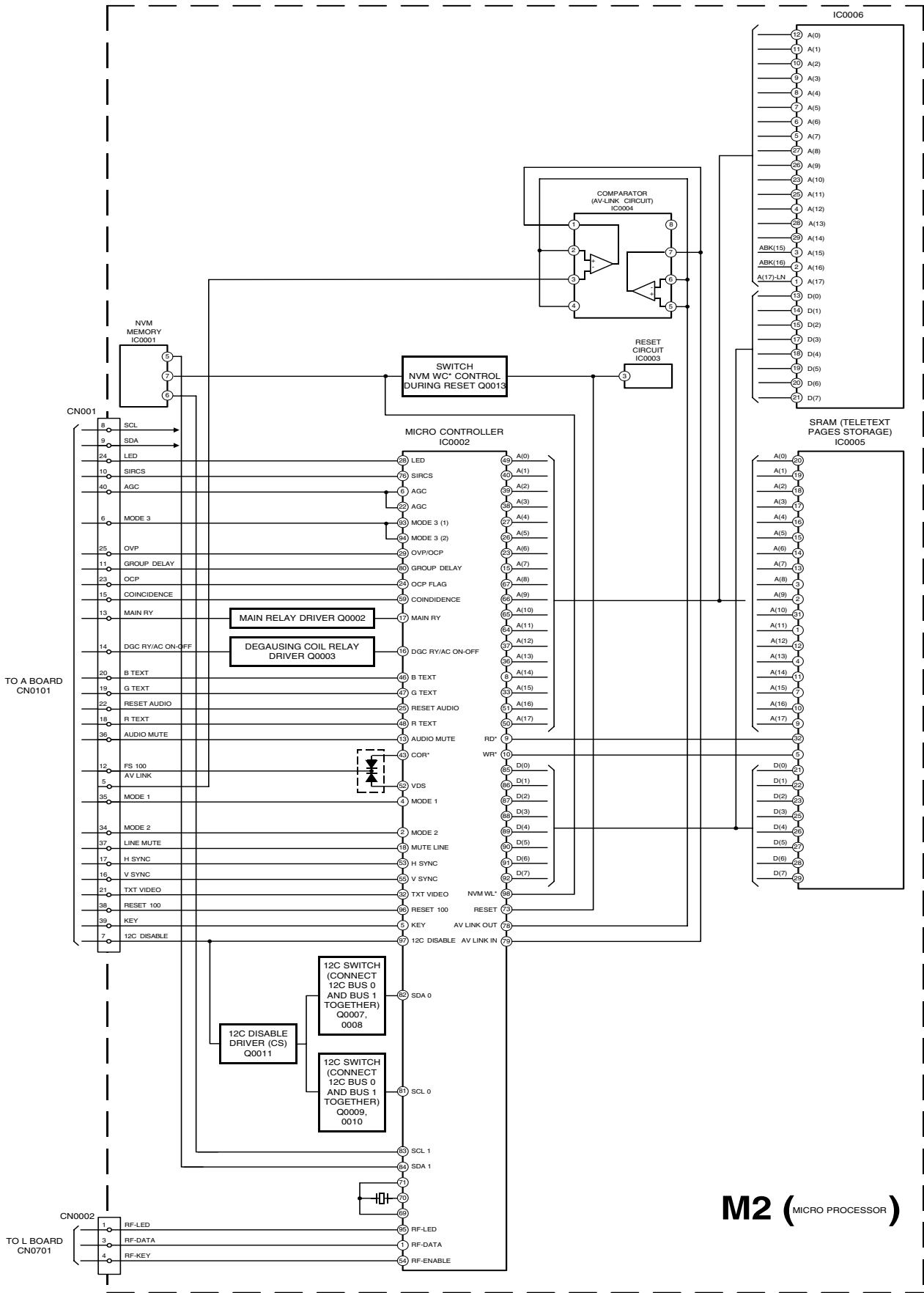


5-1. BLOCK DIAGRAMS (3)

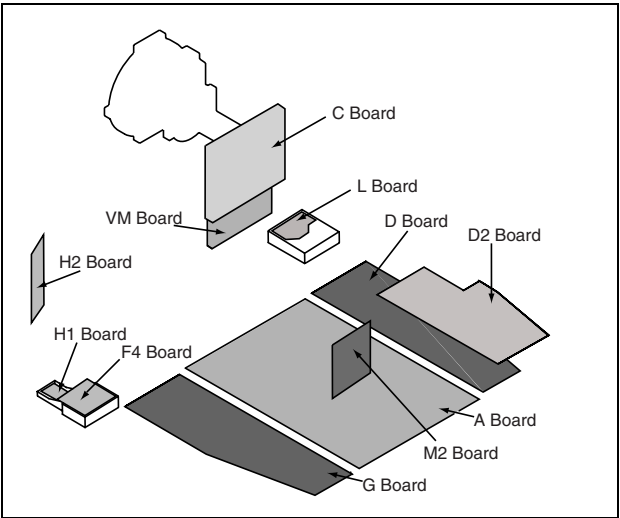




5-1. BLOCK DIAGRAMS (4)



5-2. CIRCUIT BOARD LOCATION



5-3. SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS

Note :

- All capacitors are in  $\mu\text{F}$  unless otherwise noted.
- pF :  $\mu\text{F}$  50WV or less are not indicated except for electrolytic types.
- Indication of resistance, which does not have one for rating electrical power, is as follows.

Pitch : 5mm  
Electrical power rating : 1/4W

- Chip resistors are 1/10W
- All resistors are in ohms.  
k = 1000 ohms, M = 1000,000 ohms

- : nonflammable resistor.
- : fusible resistor.
- : internal component.
- : panel designation or adjustment for repair.

- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- All voltages are in Volts.
- Readings are taken with a 10Mohm digital mutimeter.
- Readings are taken with a color bar input signal.
- Voltage variations may be noted due to normal production tolerences.

- : B + bus.
- : B - bus.
- : RF signal path.
- : earth - ground.
- : earth - chassis.

Reference Information

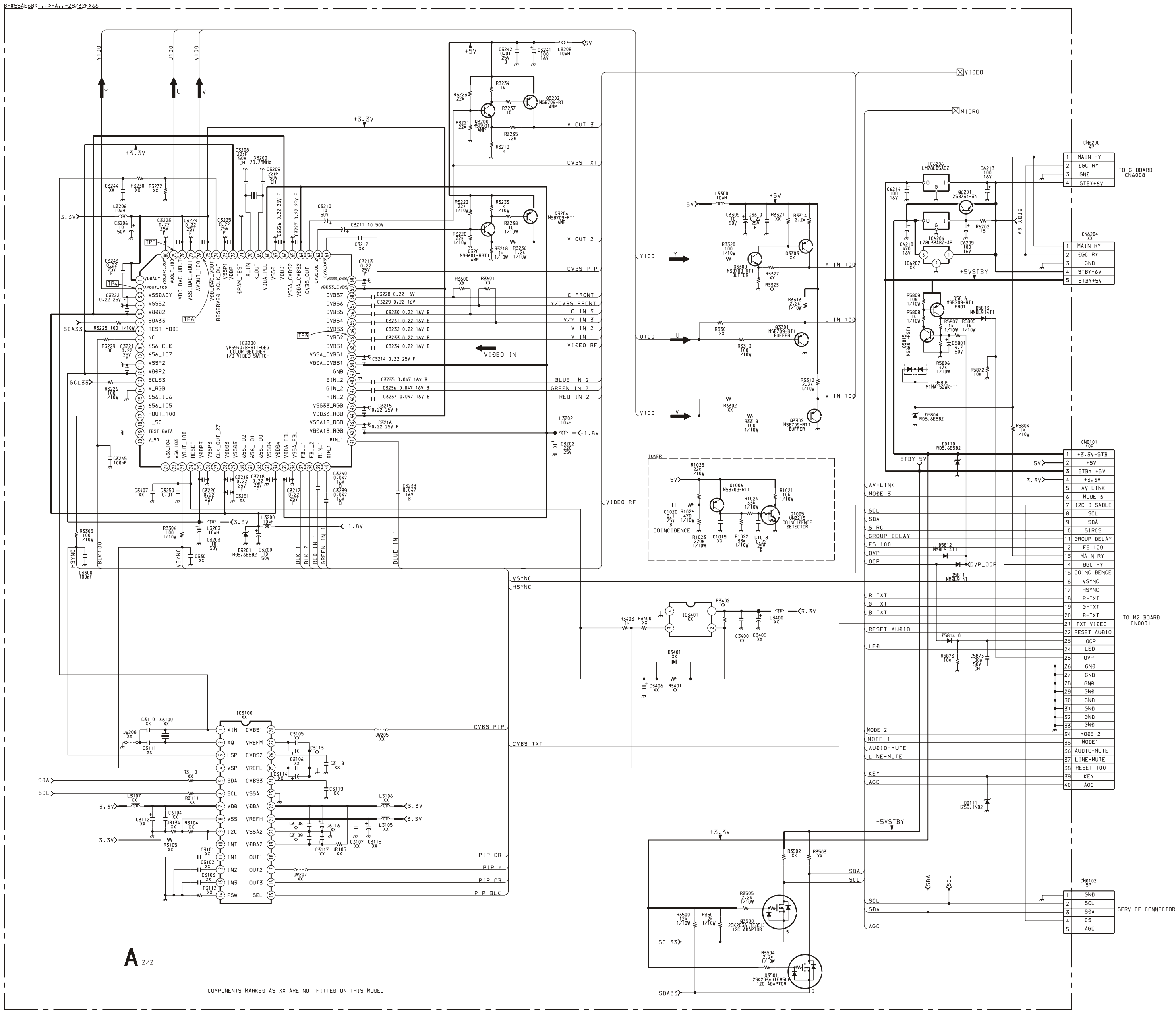
RESISTOR	RN	: METAL FILM
	RC	: SOLID
	FPRD	: NON FLAMMABLE CARBON
	FUSE	: NON FLAMMABLE FUSIBLE
	RS	: NON FLAMMABLE METAL OXIDE
	RB	: NON FLAMMABLE CEMENT
	RW	: NON FLAMMABLE WIREWOUND
		: ADJUSTMENT RESISTOR
COIL	LF-8L	: MICRO INDUCTOR
CAPACITOR	TA	: TANTALUM
	PS	: STYROL
	PP	: POLYPROPYLENE
	PT	: MYLAR
	MPS	: METALIZED POLYESTER
	MPP	: METALIZED POLYPROPYLENE
	ALB	: BIPOLAR
	ALT	: HIGH TEMPERATURE
	ALR	: HIGH RIPPLE

**Note :** The components identified by shading and marked  $\Delta$  are critical for safety. Replace only with the part numbers specified in the parts list.

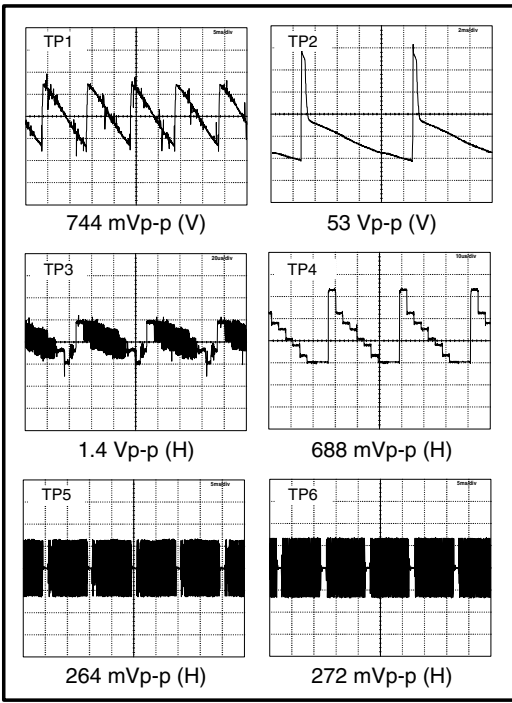
**Note :** Les composants identifiés par une trame et par une marque  $\Delta$  sont d'une importance critique pour la sécurité. Ne les remplacer que par des pièces de numéro spécifié.







~ A Board Waveforms ~

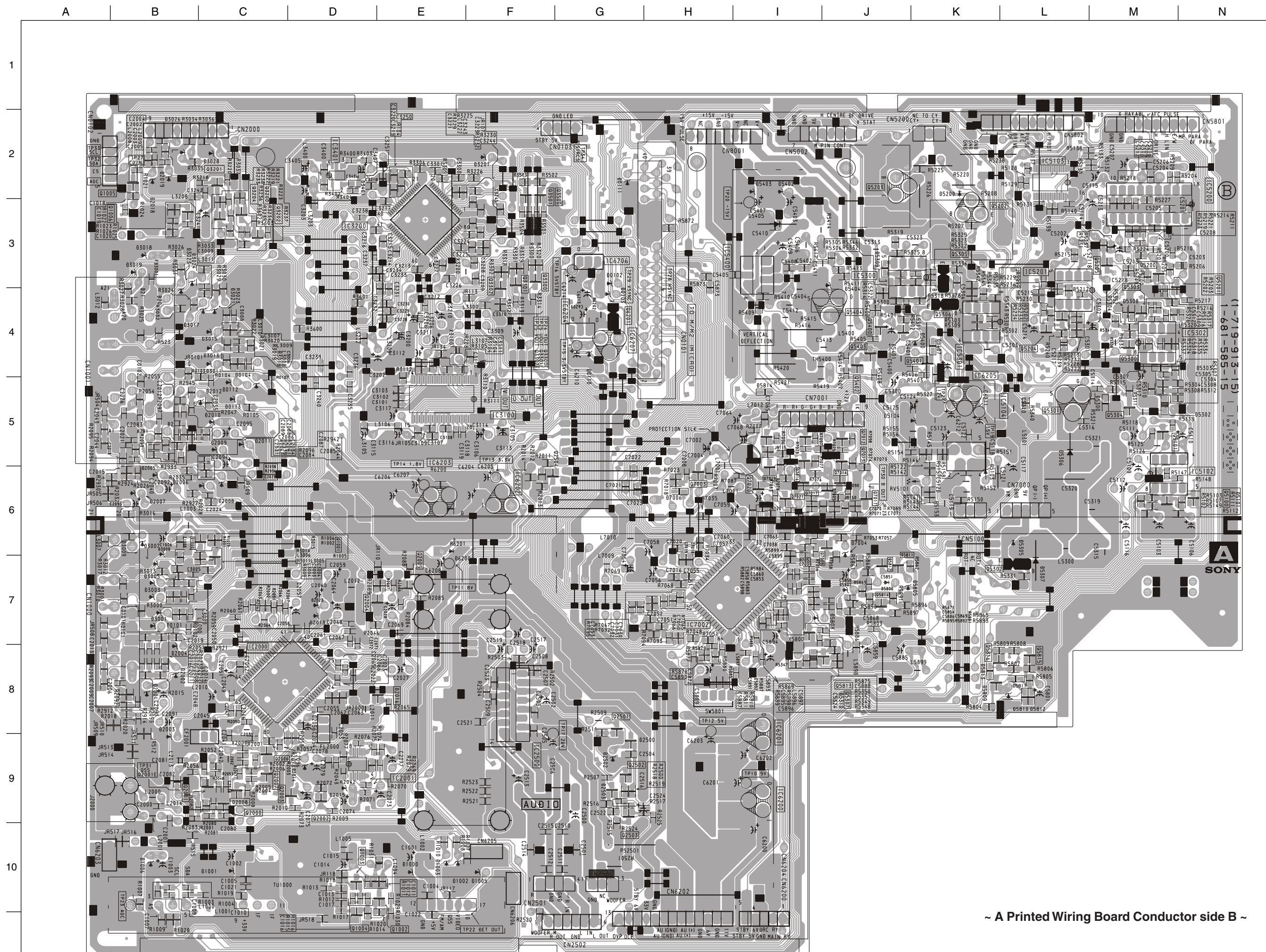


~ A Board Difference Table ~

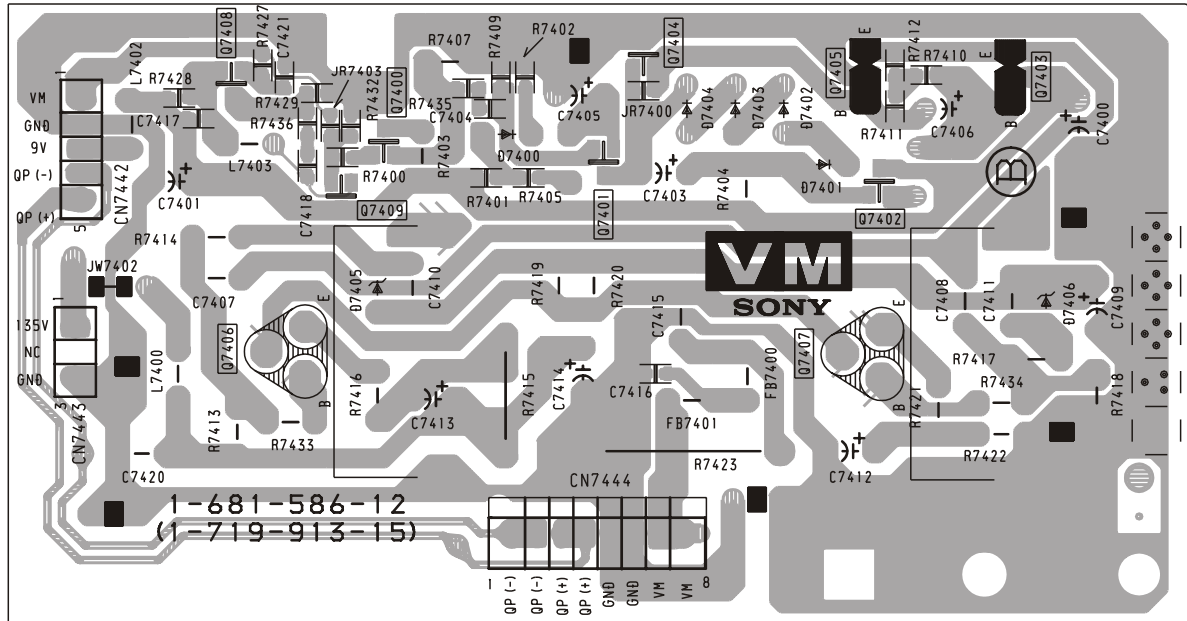
Ref	28FX66B	28FX66E	28FX66U	32FX66B	32FX66E	32FX66K	32FX66U
C1011	120PF 5.00% 50V	-	-	120PF 5.00% 50V	-	-	-
C1012	56PF 5.00% 50V	-	-	56PF 5.00% 50V	-	-	-
C1016	10PF 0.50% 50V	-	-	10PF 0.50% 50V	-	-	-
C1017	68PF 5.00% 50V	-	-	68PF 5.00% 50V	-	-	-
L1004	18UH	-	-	18UH	-	-	-
Q1002	MSD601-RST1	-	-	MSD601-RST1	-	-	-
Q1003	DTC114EK	-	-	DTC114EK	-	-	-
R1011	330 5% 1/10W	-	-	330 5% 1/10W	-	-	-
R1012	330 5% 1/10W	-	-	330 5% 1/10W	-	-	-
R1014	-	SHORT 0	SHORT 0	-	SHORT 0	SHORT 0	SHORT 0
R1015	470 5% 1/10W	-	-	470 5% 1/10W	-	-	-
R1016	100 5% 1/10W	-	-	100 5% 1/10W	-	-	-
R1018	2.2K 5% 1/10W	-	-	2.2K 5% 1/10W	-	-	-
R1020	SHORT 0	-	-	SHORT 0	-	-	-
TU1000	BTF-EF411	BTF-EC411	BTF-EU611	BTF-EF411	BTF-EC411	BTF-EC411	BTF-EU611



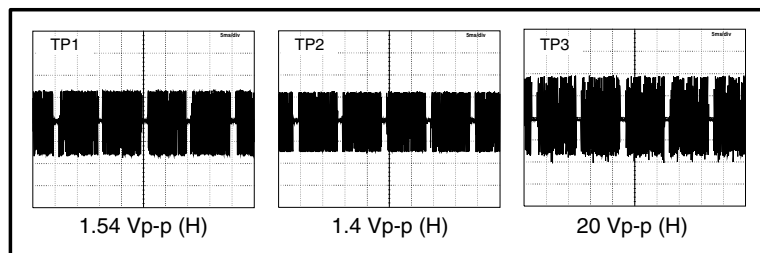




~ VM Printed Wiring Board Conductor side ~



~ VM Board Waveforms ~



~ VM Board Voltage Table ~

Ref	(e)(s)	(b)(g)	(c)(d)
Q7400	5.0	5.7	8.7
Q7401	0.9	1.5	4.1
Q7402	5.5	6.1	8.9
Q7403	5.1	5.5	8.9
Q7404	4.7	4.1	0
Q7405	5.1	4.7	0
Q7406	134	133.8	68
Q7407	1.1	1.4	68
Q7408	6.3	5.6	2.5
Q7409	5.7	6.3	0.9

~ A Board Location Table (A Side) ~

DIODE	D1006 M - 10	D3003 M - 7	D3015 M - 4	D3026 M - 2	D5305 D - 6	D6200 J - 6	IC5301 D - 4	IC6206 H - 3
D0101 M - 7	D2014 L - 9	D3005 M - 7	D3017 M - 4	D3028 M - 2	D5306 C - 5	D7004 F - 7	IC5302 B - 4	IC6207 H - 4
D0104 L - 5	D2015 K - 9	D3007 M - 7	D3018 N - 3	D3201 J - 2	D5307 D - 7	IC	IC5400 G - 4	TRANSISTOR
D0110 I - 4	D2018 M - 2	D3008 M - 7	D3019 N - 3	D5103 D - 6	D5400 E - 4		IC6201 G - 9	
D0111 H - 2	D2019 M - 2	D3009 N - 7	D3021 M - 4	D5104 E - 5	D5404 F - 4	IC5200 B - 3	IC6202 I - 6	Q5202 E - 2
D0112 M - 4	D2502 H - 9	D3011 M - 4	D3023 M - 4	D5200 D - 2	D5405 F - 3	IC5201 C - 4	IC6203 J - 6	Q5301 C - 5
D0113 M - 5	D3001 M - 7	D3013 M - 4	D3024 M - 4	D5201 E - 2	D5807 F - 7	IC5300 E - 4	IC6205 D - 5	Q5306 E - 4
								Q5404 F - 4

~ A Board Location Table (B Side) ~

DIODE	D2503 G - 9	D3024 B - 3	D5309 J - 3	IC5103 L - 3	TRANSISTOR	Q3201 C - 2	Q5300 M - 4	Q7003 H - 6
D0101 B - 7	D3001 B - 7	D3026 B - 2	D5400 K - 4	IC5104 K - 5	Q1000 C - 6	Q3202 C - 3	Q5301 L - 5	Q7009 I - 7
D0104 C - 5	D3003 B - 7	D3028 C - 2	D5401 J - 4	IC5200 M - 3	Q1001 D - 6	Q3204 C - 3	Q5302 K - 7	Q7011 J - 6
D0110 G - 4	D3005 B - 7	D3201 F - 2	D5404 J - 3	IC5201 L - 4	Q1004 D - 11	Q3300 F - 3	Q5303 M - 4	Q7012 J - 5
D0111 G - 2	D3007 B - 6	D5103 L - 6	D5405 I - 3	IC5300 J - 3	Q1005 B - 2	Q3301 F - 3	Q5304 M - 5	Q7013 J - 6
D0112 C - 5	D3008 B - 6	D5104 J - 5	D5809 K - 8	IC5301 K - 4	Q1006 B - 3	Q3302 F - 3	Q5305 K - 3	Q7014 J - 6
D0113 C - 5	D3009 B - 6	D5200 K - 2	D5811 L - 8	IC5302 M - 4	Q2000 C - 9	Q3500 F - 3	Q5306 K - 4	Q7015 I - 5
D1006 B - 10	D3011 C - 4	D5202 L - 4	D5812 L - 8	IC5400 I - 3	Q2002 D - 9	Q3501 F - 3	Q5400 J - 4	Q7016 I - 6
D2014 C - 9	D3013 C - 4	D5300 L - 5	D6200 E - 7	IC6200 I - 9	Q2003 D - 9	Q5101 M - 5	Q5401 J - 4	Q7017 I - 6
D2015 D - 9	D3015 C - 4	D5303 N - 4		IC6201 I - 8	Q2004 E - 7	Q5200 M - 4	Q5402 J - 5	Q7018 I - 5
D2016 E - 8	D3017 B - 4	D5304 M - 4	IC	IC6202 F - 6	Q2005 E - 7	Q5201 N - 4	Q5403 J - 4	Q7019 I - 6
D2018 B - 2	D3018 B - 3	D5305 L - 6		IC6203 E - 6	Q2501 G - 8	Q5202 K - 3	Q5404 J - 4	
D2019 B - 2	D3019 B - 3	D5306 L - 5	IC2500 F - 8	IC6205 K - 5	Q2502 G - 9	Q5203 J - 2	Q5813 J - 8	
D2500 G - 9	D3021 C - 4	D5307 L - 7	IC3100 E - 5	IC6206 G - 3	Q2503 G - 9	Q5204 L - 4	Q5815 L - 8	
D2502 G - 9	D3023 B - 3	D5308 M - 4	IC3200 E - 3	IC6207 G - 4	Q3200 C - 3	Q5205 M - 3	Q5816 L - 8	



~ A Board Semiconductor Voltage Table ~

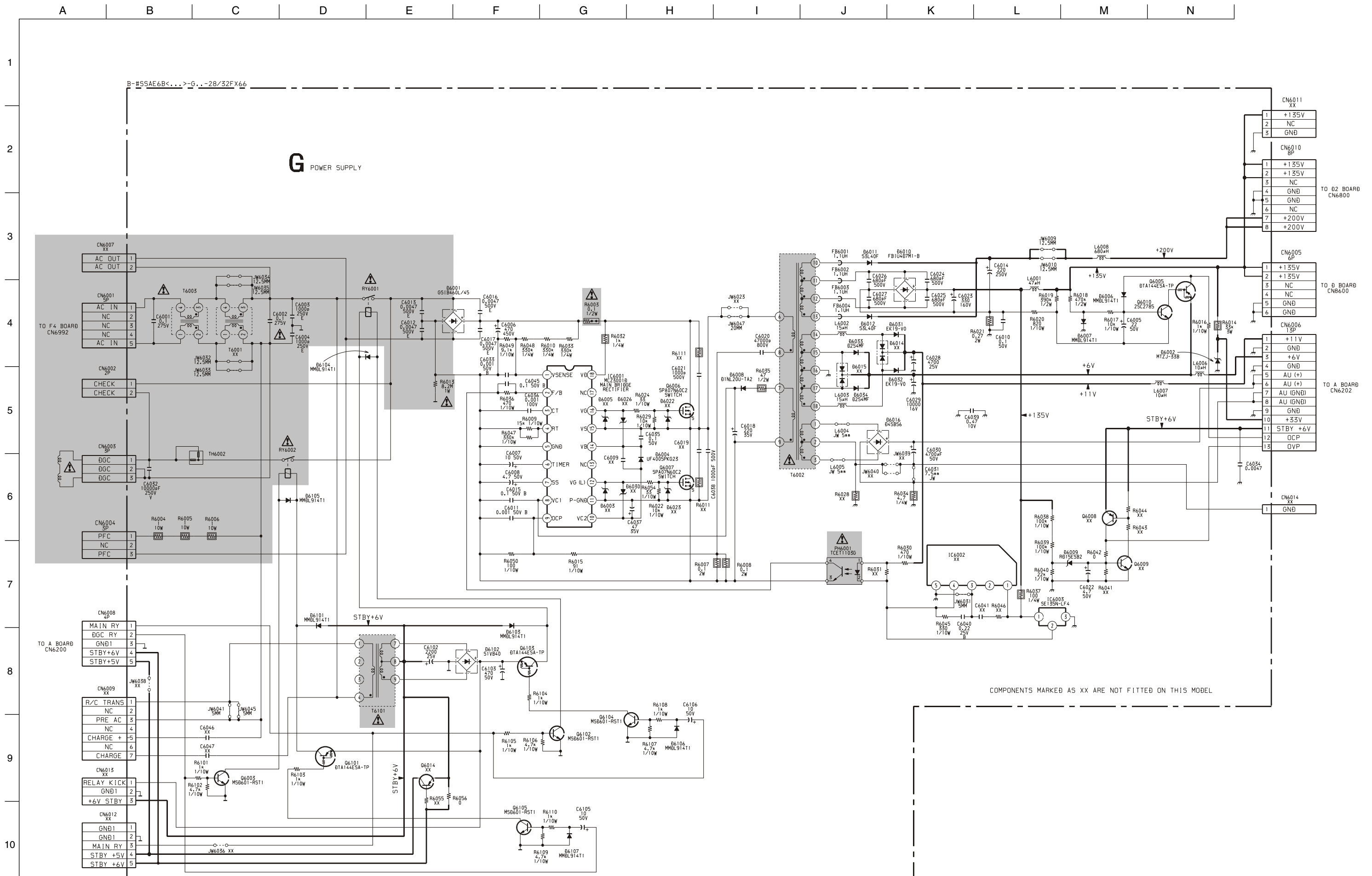
Ref	(s)	(g)	(d)	Ref	(e)	(b)	(c)	Ref	(e)	(b)	(c)	Ref	(e)	(b)	(c)	Ref	(e)	(b)	(c)	Ref	(e)	(b)	(c)
Q3500	2.7	3.3	3.9	Q2002	0	0	4	Q3204	5	4.4	3.4	Q5205	1.9	1.2	0	Q5813	0	7.9	0	Q7015	11.6	10.9	8.8
Q3501	2.7	3.3	4	Q2003	0	0	4	Q3300	0.7	1.3	5	Q5300	0	0.4	2.2	Q5814	0	0	0	Q7016	6	6.6	10.9
Q5301	0	5.1	51.2	Q2004	3.3	3.9	8.3	Q3301	1.9	1.2	0	Q5301	5.1	0	51.2	Q5815	0	0	5	Q7017	2.7	2	0
Q5404	0	0	0.5	Q2005	3.3	3.9	8.3	Q3302	1.9	1.2	0	Q5302	8.9	5.7	0	Q5816	5	5	0	Q7018	11.6	10.9	8.6
Ref	(e)	(b)	(c)	Q2501	0	0	15.2	Q3500	3.3	2.7	3.9	Q5304	0	0.4	5.6	Q7003	5.6	6.2	8.8	Q7019	6	6.6	10.9
Q1001	3.2	3.9	8.3	Q2502	0	0.7	0	Q3501	3.3	2.7	4	Q3400	0	0	0.1	Q7009	3.2	7	0.1	Q7020	8.9	8.9	0
Q1004	1.9	1.3	0	Q2503	0.6	0.6	0.5	Q5101	0	0.4	6.4	Q5401	0	0	7.9	Q7011	2.5	1.9	0	Q7021	2.7	2.7	8.9
Q1005	0	0.5	5	Q3200	1.9	2.5	4.4	Q5201	2.8	3.4	7.9	Q5402	0	0	-11.3	Q7012	11.6	10.9	8.7				
Q1006	5	4.7	1	Q3201	1.9	2.5	4.4	Q5202	0.2	0.8	11.7	Q5403	-13.5	-11.2	-8.3	Q7013	6	6.6	10.9				
Q2000	4.2	4.8	8.3	Q3202	5	4.4	3.4	Q5203	0.2	0.8	11.7	Q5404	0	0	0.5	Q7014	2.5	1.8	0				

~ A Board IC Voltage Table ~

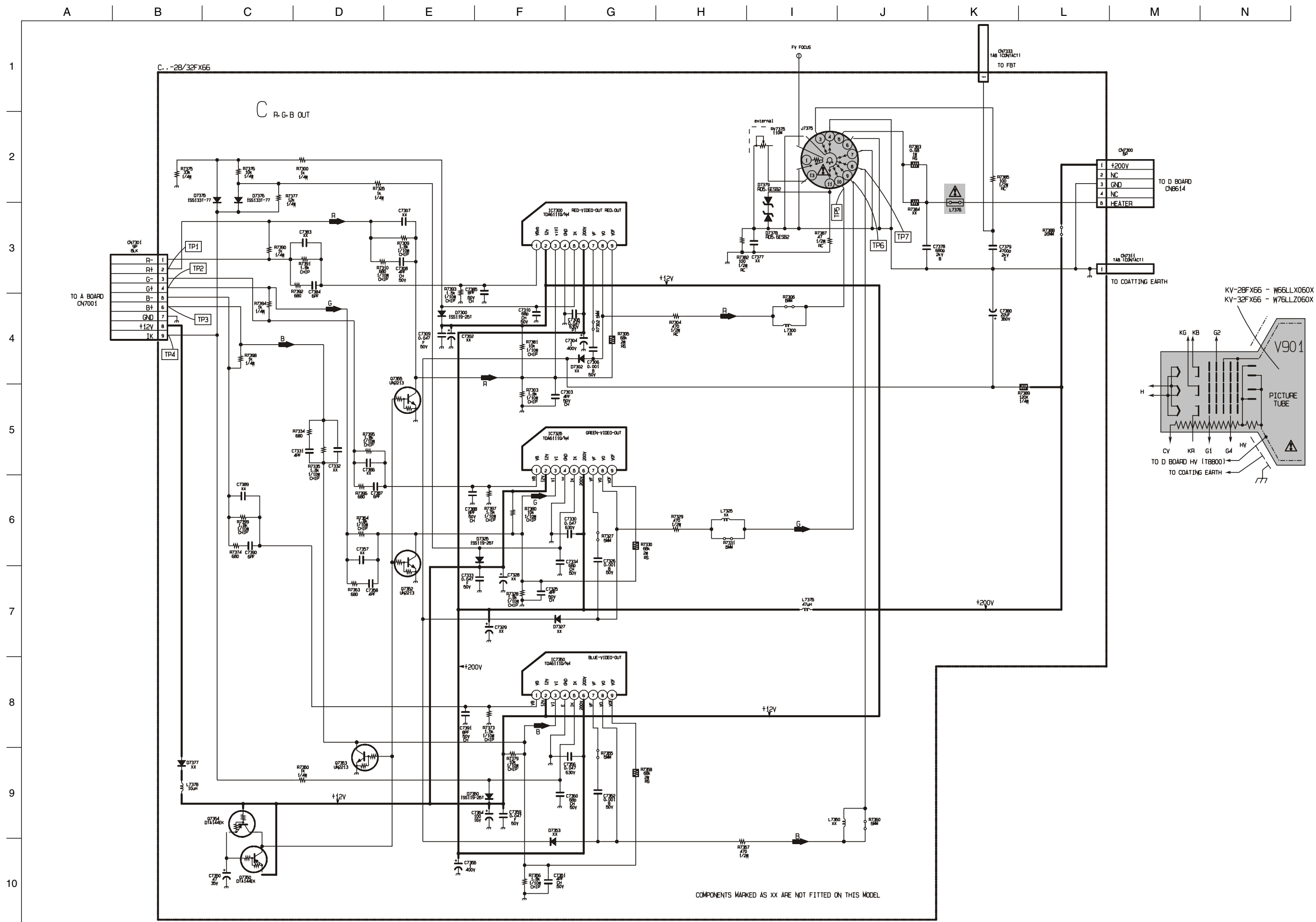
Ref No	Pin No	Volts (V)	Ref No	Pin No	Volts (V)	Ref No	Pin No	Volts (V)	Ref No	Pin No	Volts (V)
IC5103	1	3.3	IC5301	5	6.5	IC7002	10	0.4	IC7002	38	0
	2	3.3		6	7.1		11	1.9		39	4.8
	3	1.9		7	0.4		12	0.4		40	4.8
	4	2.6		8	12		13	0.9		41	4.8
	5	2.5	IC5302	1	0		14	5		42	0
	6	1.8		2	5.8		15	2.5		43	0
	7	2		3	6.3		16	0		44	0
	8	0		4	0		17	3		45	6.3
	9	3.1		5	6.6		18	2.7		46	8.9
	10	3		6	6.5		19	3.9		47	8.9
	11	5		7	0.4		20	0		48	6
	12	5		8	12		21	6.1		49	2.5
	13	5	IC5400	1	1.4		22	2.7		50	4.1
	14	0		2	13.2		23	8.8		51	0
	15	0		3	-12.5		24	0		52	6
	16	5		4	-15.4		25	4.3		53	5.8
IC5300	1	6		5	-0.4		26	3.2		54	5.8
	2	6		6	13.7		27	5.2		55	0.4
	3	6		7	1.4		28	0.3		56	5.8
	4	0	IC7002	1	3.6		29	4.9		57	5.8
	5	6		2	0		30	3.4		58	5.8
	6	6		3	4.4		31	5.6		59	0.3
	7	6		4	4.8		32	8.9		60	0
	8	12		5	3.5		33	0		61	0
IC5301	1	1.7		6	3.4		34	4.7		62	2.9
	2	8.5		7	7.6		35	4.7		63	3.7
	3	6.5		8	0		36	4.7			
	4	0		9	0		37	8.9			







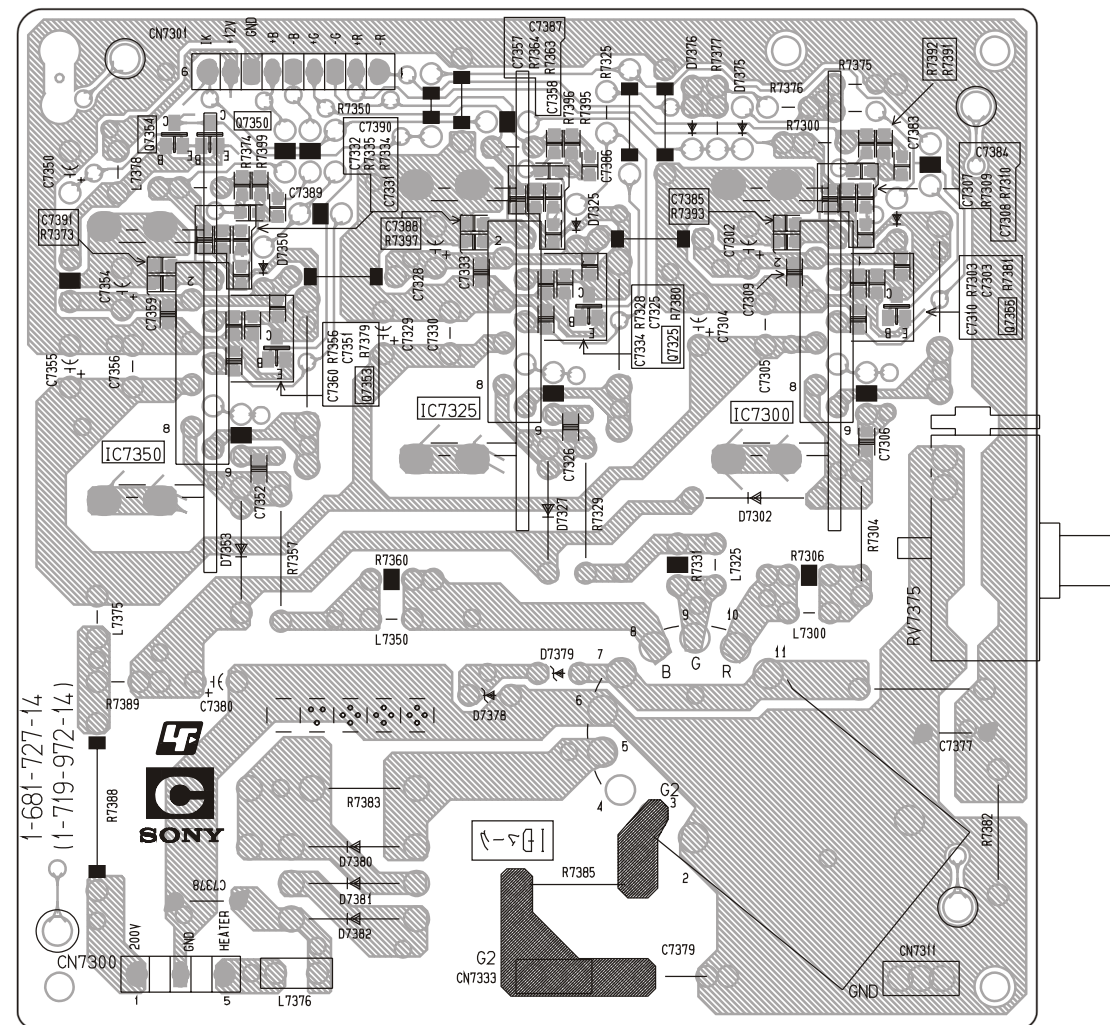
~ G Board Schematic Diagram [ Power Supply ] ~



~ C Board Schematic Diagram [ R-G-B Out ] ~



~ C Printed Wiring Board Conductor side ~



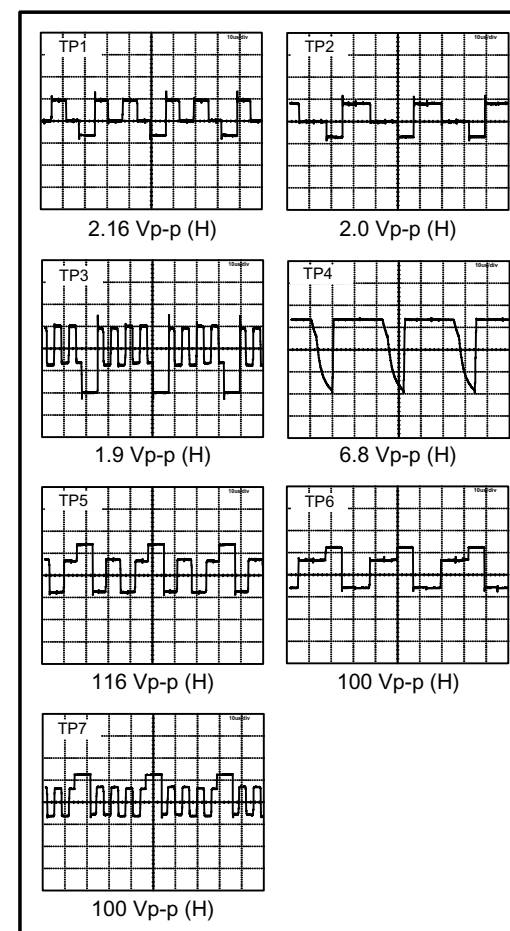
### ~ C Board Semiconductor Voltage Table ~

Ref	(e)	(b)	(c)
Q7350	12	11.98	0
Q7352	0	0	3.8
Q7353	0	0	3.8
Q7354	11.98	12	0
Q7355	0	0	3.8

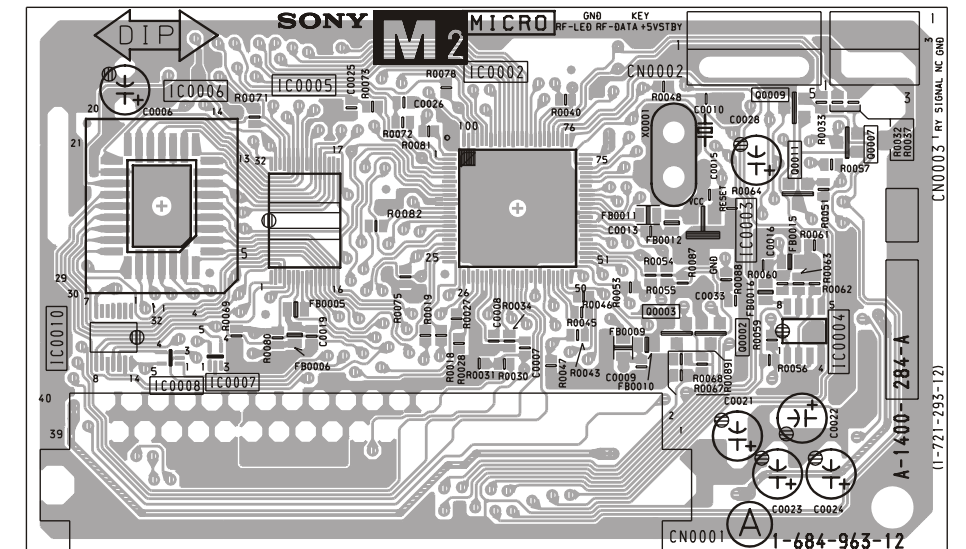
### ~ C Board IC Voltage Table ~

IC Voltage Table		
Ref No	Pin No	Voltage (V)
IC7300	1	3.9
	3	3.8
	5	7.5
	6	200
	7	140
	8	153
IC7325	9	140
	1	3.9
	3	3.8
	5	7.7
	6	200
	7	140
IC7350	8	153
	9	140
	1	3.9
	3	3.8
	5	7.5
	6	200
	7	139
	8	148
	9	138

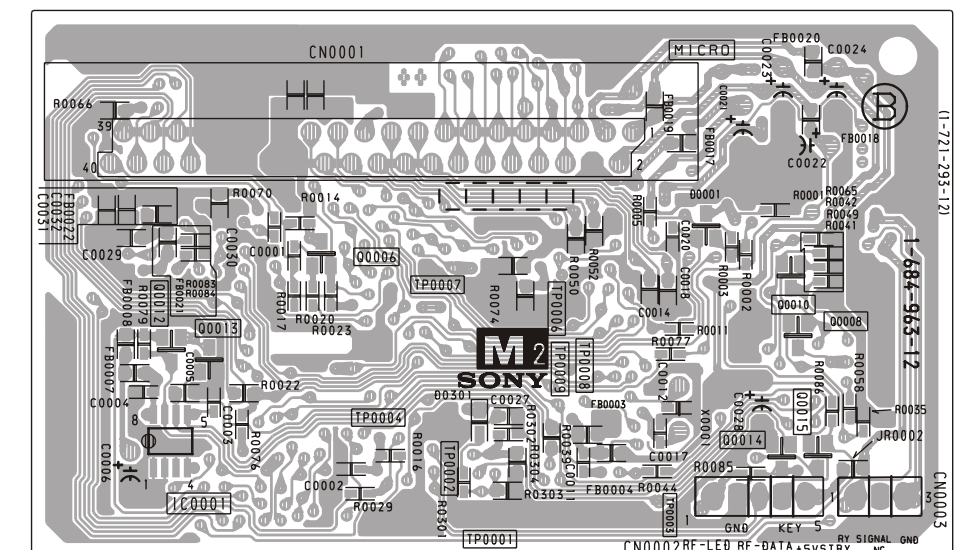
~ C Board Waveforms ~



~ M2 Printed Wiring Board Conductor side A ~



~ M2 Printed Wiring Board Conductor side B ~

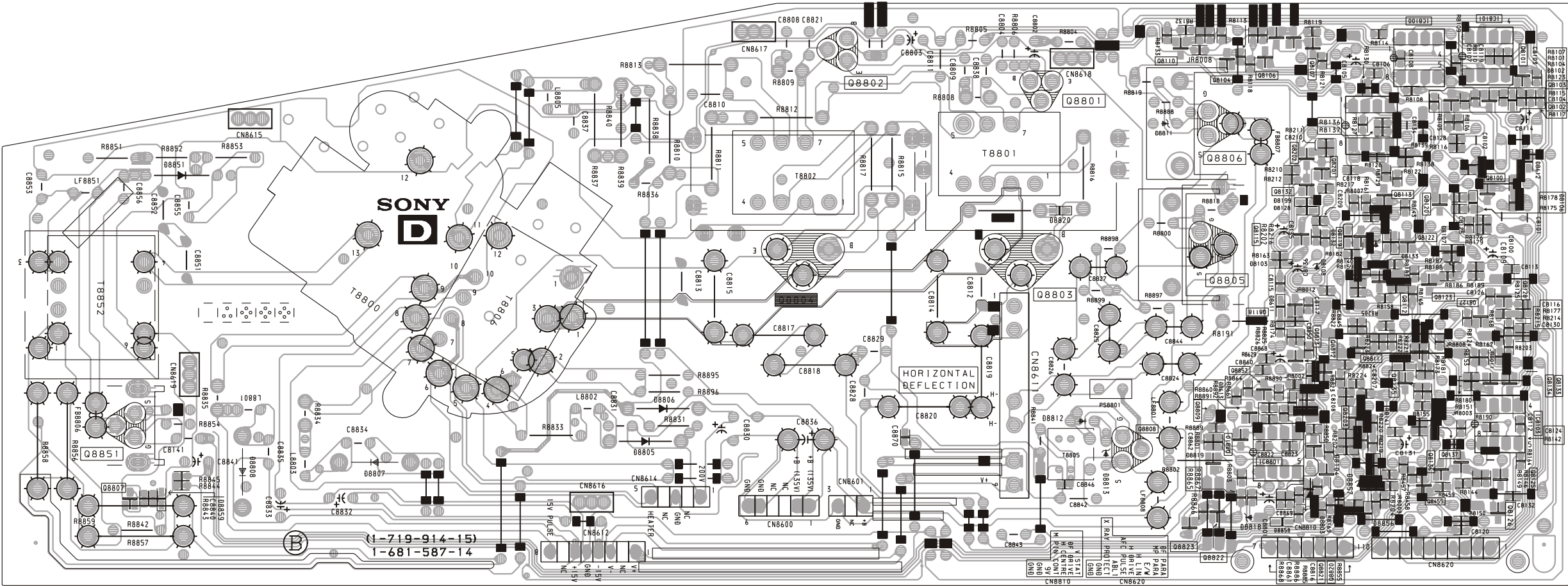




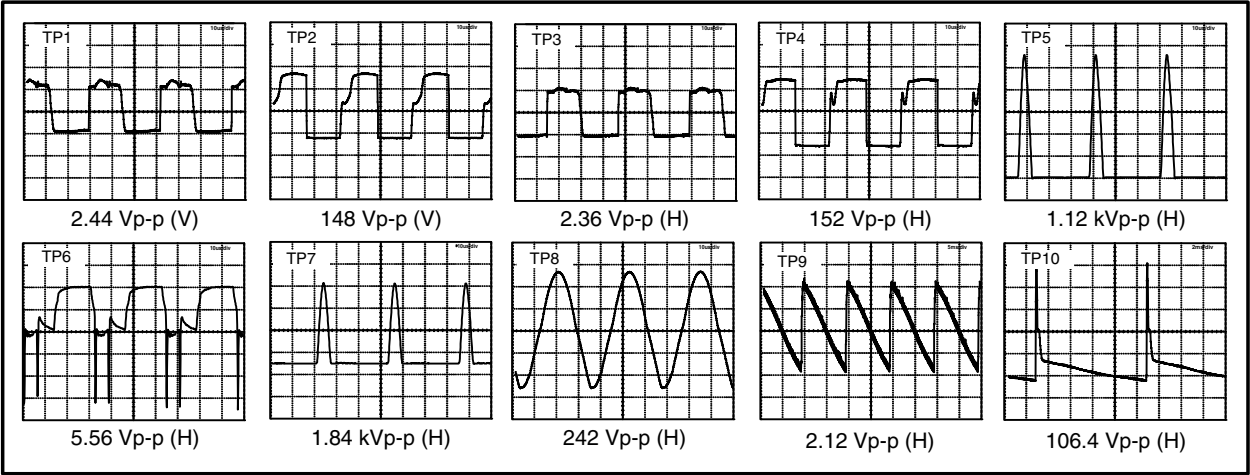


A B C D E F G H I J K L M N

~ D Printed Wiring Board Conductor side ~



~ D Board Waveforms ~



~ D Board IC Voltage Table ~

IC Voltage Table		
Ref No	Pin No	Voltage (V)
IC8100	1	0.3
	2	4.3
	3	4.1
	5	4.1
	6	3.0
	7	0.4
	8	0.4
IC8101	1	0.3
	2	4.3
	3	4.4
	5	4.4
	6	3.0
	7	0.4
	8	0.4
IC8102	1	4.1
	2	0.4
	3	0.4
	5	0.4
	6	0.4
	7	0.4
	8	0.4
IC8103	1	2.5
	2	2.1
	3	1.7
	5	1.6
	6	1.0
	7	1.1
	8	1.1

~ D Board Semiconductor Voltage Table ~

Ref	(e)(s)	(b)(g)	(c)(d)	Ref	(e)(s)	(b)(g)	(c)(d)	Ref	(e)(s)	(b)(g)	(c)(d)	Ref	(e)(s)	(b)(g)	(c)(d)
Q8100	0	0.6	3.6	Q8110	2.4	3.1	0	Q8128	3.4	1.5	8.9	Q8801	0	0.4	64.7
Q8101	0	0.6	4.3	Q8113	0.3	0.2	8.9	Q8132	0	0	3.4	Q8802	0	0.4	73.2
Q8102	0	0.3	4.3	Q8115	8.6	8.9	0	Q8135	2.6	3.2	8.9	Q8807	0	6.3	0
Q8103	4.0	0	8.9	Q8118	0	0	5.0	Q8136	2.5	1.8	0	Q8818	0	0	5.0
Q8104	0	0.4	3.1	Q8119	0.7	1.4	0	Q8137	1.8	2.5	8.9	Q8822	5.5	4.9	0
Q8105	0	0.4	3.2	Q8120	0.7	2.3	0	Q8201	0	0.6	3.9	Q8823	8.9	8.5	0
Q8106	0	0.3	4.3	Q8122	0.5	1.4	0	Q8202	0	0.8	3.4	Q8805	0	2.5	33
Q8107	0	0.3	4.2	Q8123	0.5	1.4	0	Q8203	1.4	0.9	0	Q8806	0	1.2	135
Q8108	2.4	3.2	0	Q8127	1.4	1.5	0	Q8455	1.1	1.7	8.9	Q8851	0	5.4	81.5



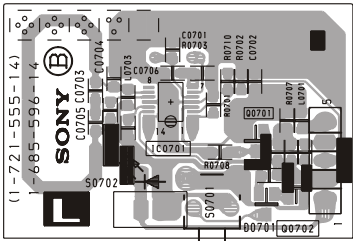




~ D Board Difference Table ~

Ref	28FX66	32FX66
C8106	0.001UF 10.00% 50V	470PF 5.00% 50V
C8107	-	27K 0.5% 1/10W
C8130	220PF 5.00% 50V	-
C8814	7500PF 3.00% 1.2KV	6800PF 3% 1.2KV
C8815	6800PF 3.00% 1.5KV	6200PF 3% 1.5KV
C8825	0.22UF 5.00% 250V	0.18UF 5% 250V
C8826	0.68UF 5% 250V	0.56UF 5% 250V
R8127	4.7K 0.5% 1/10W	6.8K 0.5% 1/10W
R8141	22K 0.5% 1/10W	33K 0.5% 1/10W
R8142	7.5K 0.5% 1/10W	4.7K 0.5% 1/10W
R8149	22K 5% 1/10W	3.9K 5% 1/10W
R8150	22K 5% 1/10W	6.8K 0.5% 1/10W
R8154	5.6K 5% 1/10W	1.2K 0.5% 1/10W
R8155	4.7K 0.5% 1/10W	2.7K 5% 1/10W
R8158	2.2K 0.5% 1/10W	4.7K 0.5% 1/10W
R8159	2.2K 0.5% 1/10W	SHORT 0
R8161	6.8K 0.5% 1/10W	8.2K 0.5% 1/10W
R8175	4.7K 5% 1/10W	6.8K 0.5% 1/10W
R8176	SHORT 0	10K 5% 1/10W
R8177	5.6K 5% 1/10W	4.7K 5% 1/10W
R8179	4.7K 5% 1/10W	SHORT 0
R8186	2.7K 5% 1/10W	3.3K 5% 1/10W
R8189	1.5K 5% 1/10W	560 5% 1/10W
R8203	6.8K 0.5% 1/10W	SHORT 0
R8215	22K 0.5% 1/10W	47K 0.5% 1/10W
R8216	47K 5% 1/10W	47K 0.5% 1/10W
R8810	4.7K 5% 2W	3.9K 5% 2W
R8886	-	150K 0.5% 1/10W
R8897	470K 1% 1/4W	680K 1% 1/4W

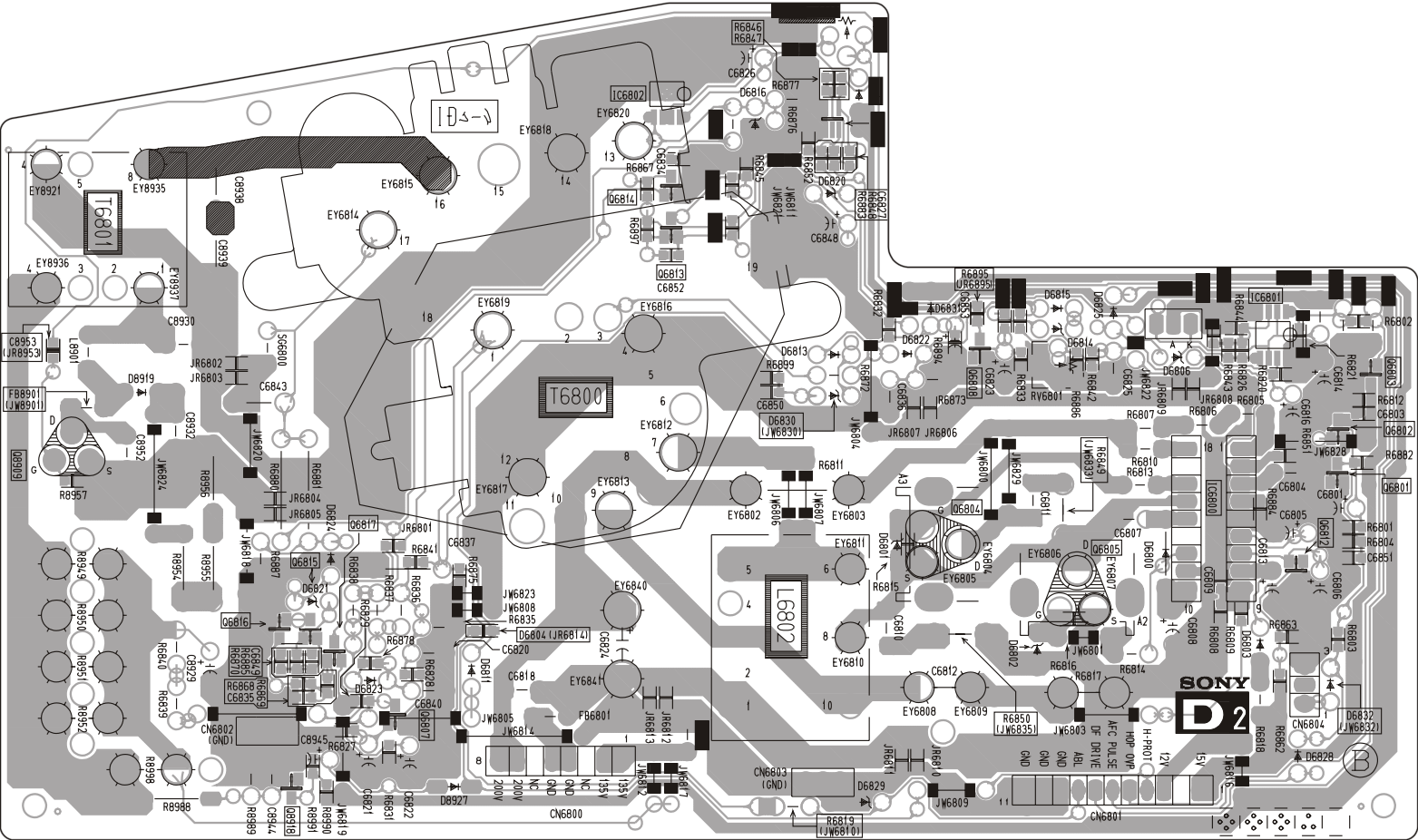
~ L Printed Wiring Board Conductor side ~



~ D2 Board Difference Table ~

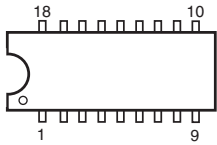
Ref	28FX66	32FX66
R6827	220K 5% 1/10W	82K 0.5% 1/10W
R6836	15K 1% 1/4W	12K 1% 1/4W
R6837	15K 1% 1/4W	12K 1% 1/4W
R6838	10K 1% 1/4W	12K 1% 1/4W
R8950	8.2K 5% 3W	10K 5% 3W
R8952	8.2K 5% 3W	10K 5% 3W
T6800	FBT ASSY NX-6020//Z214	FBT ASSY NX-6020//Z2B4

~ D2 Printed Wiring Board Conductor side ~

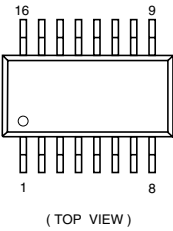


5-4. SEMICONDUCTORS

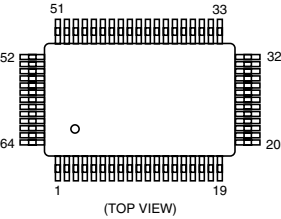
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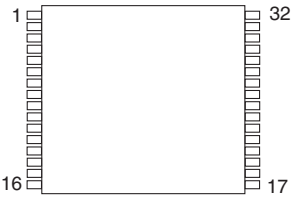
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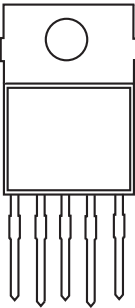
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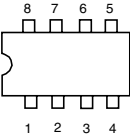
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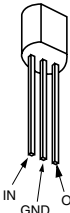
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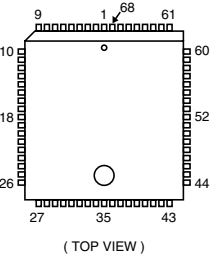
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LM358N  
LM393DT  
LM393N  
M24C16-MN6T(A)



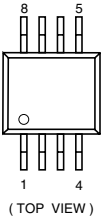
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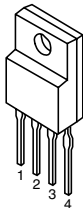
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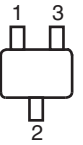


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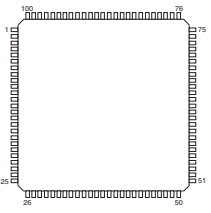


- 1: V IN
- 2: V OUT
- 3: GND
- 4: ON/OFF CONTROL

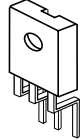
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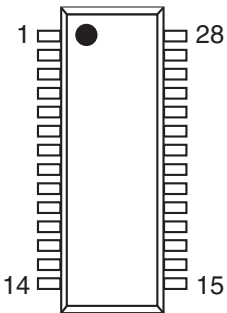
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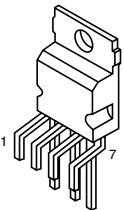
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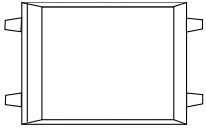
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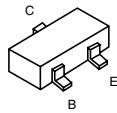
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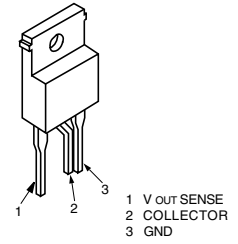
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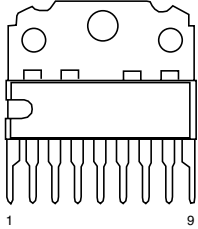
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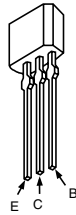
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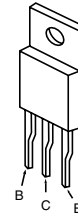
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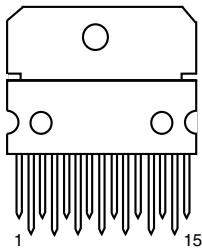
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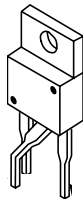
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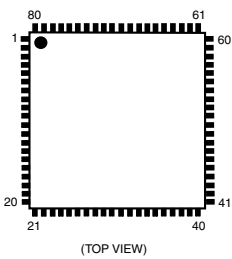
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STP5NB40(030Y)  
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2S5696-SONY-CA



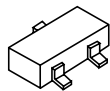
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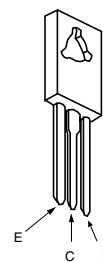
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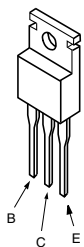
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M1MA152WA-T1  
UN2111  
UN213  
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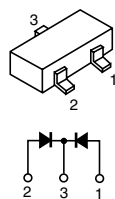
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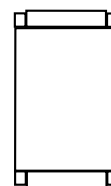
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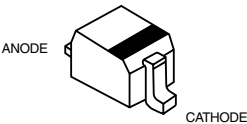


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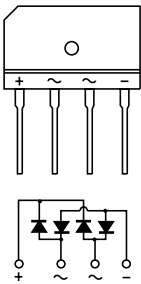




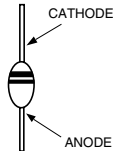
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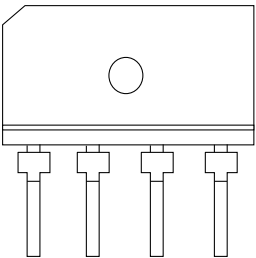
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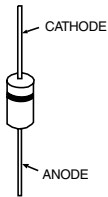
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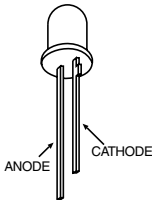
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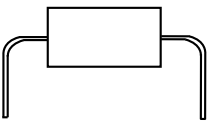
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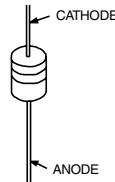


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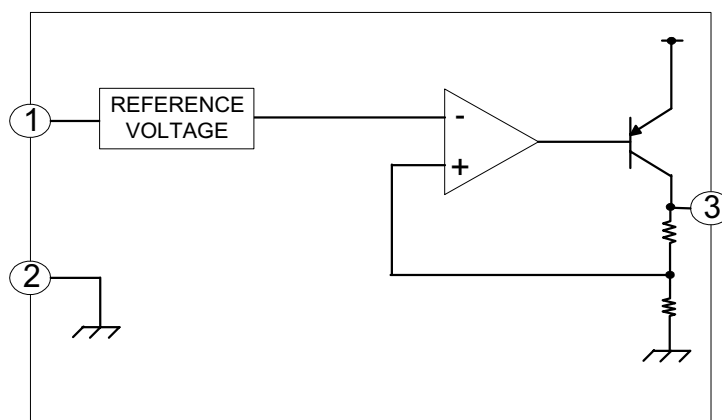
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MTZJ-4.7C

MTZJ-T-77-22  
RD15ES-B2  
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RD5.6ESB2  
1SS119-25  
1SS133T-77

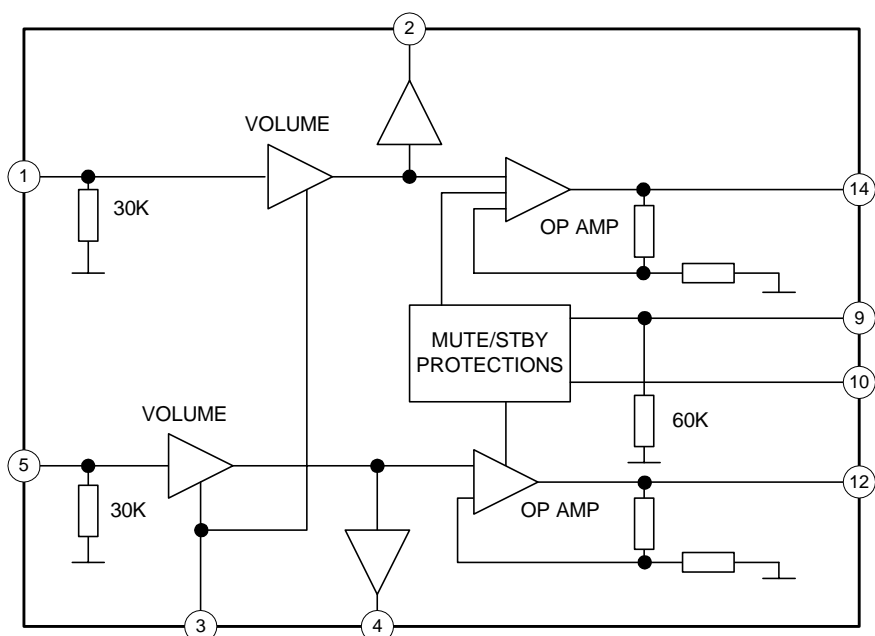


## 5-5 IC BLOCK DIAGRAMS

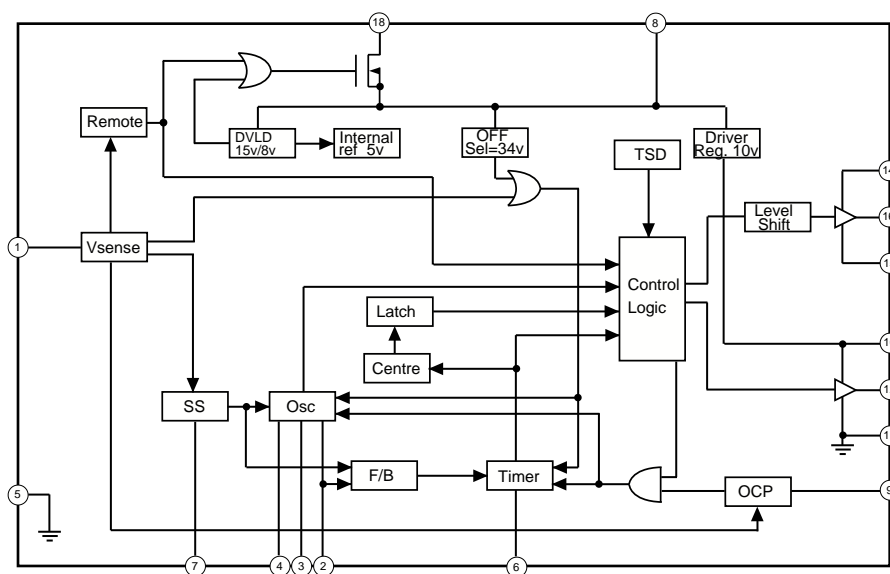
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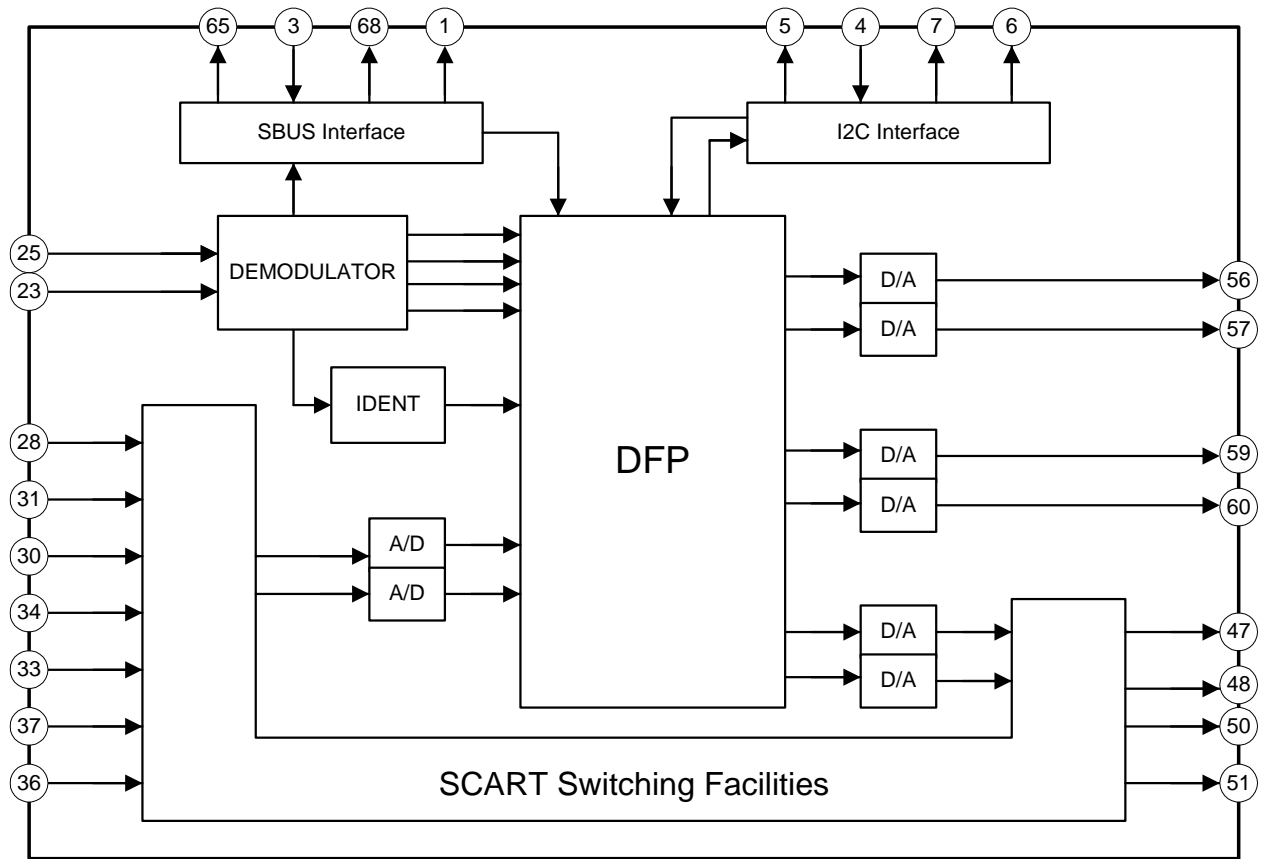
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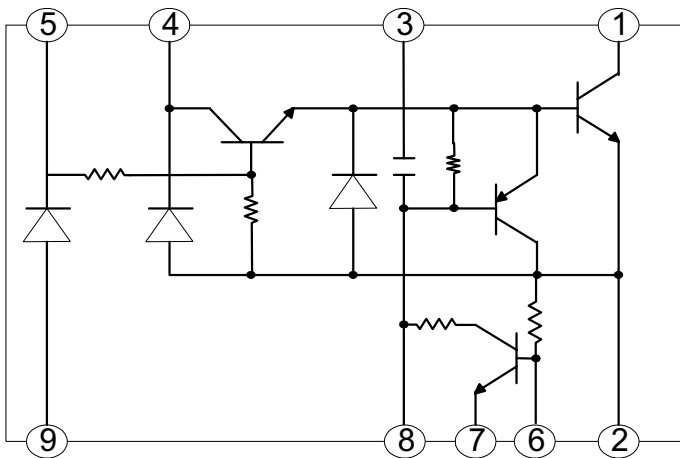
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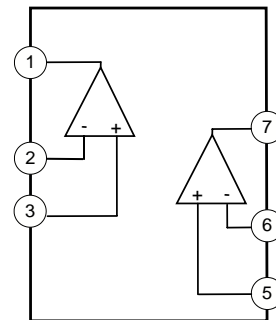
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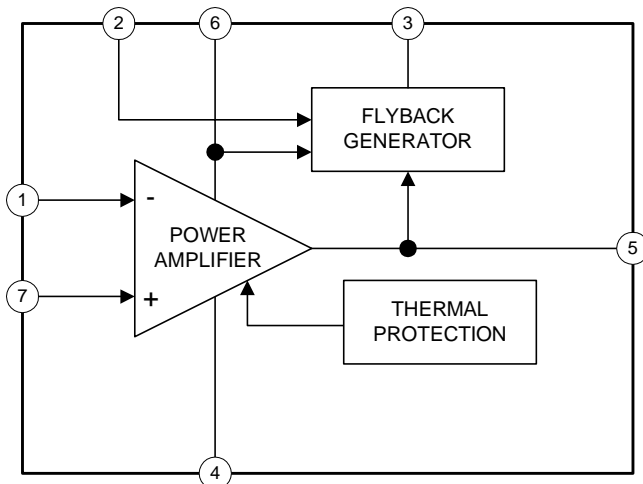
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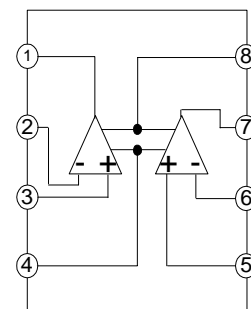
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**A BOARD IC5400 STV9379**



**A BOARD IC5300 LM358N**



## SECTION 6 EXPLODED VIEWS

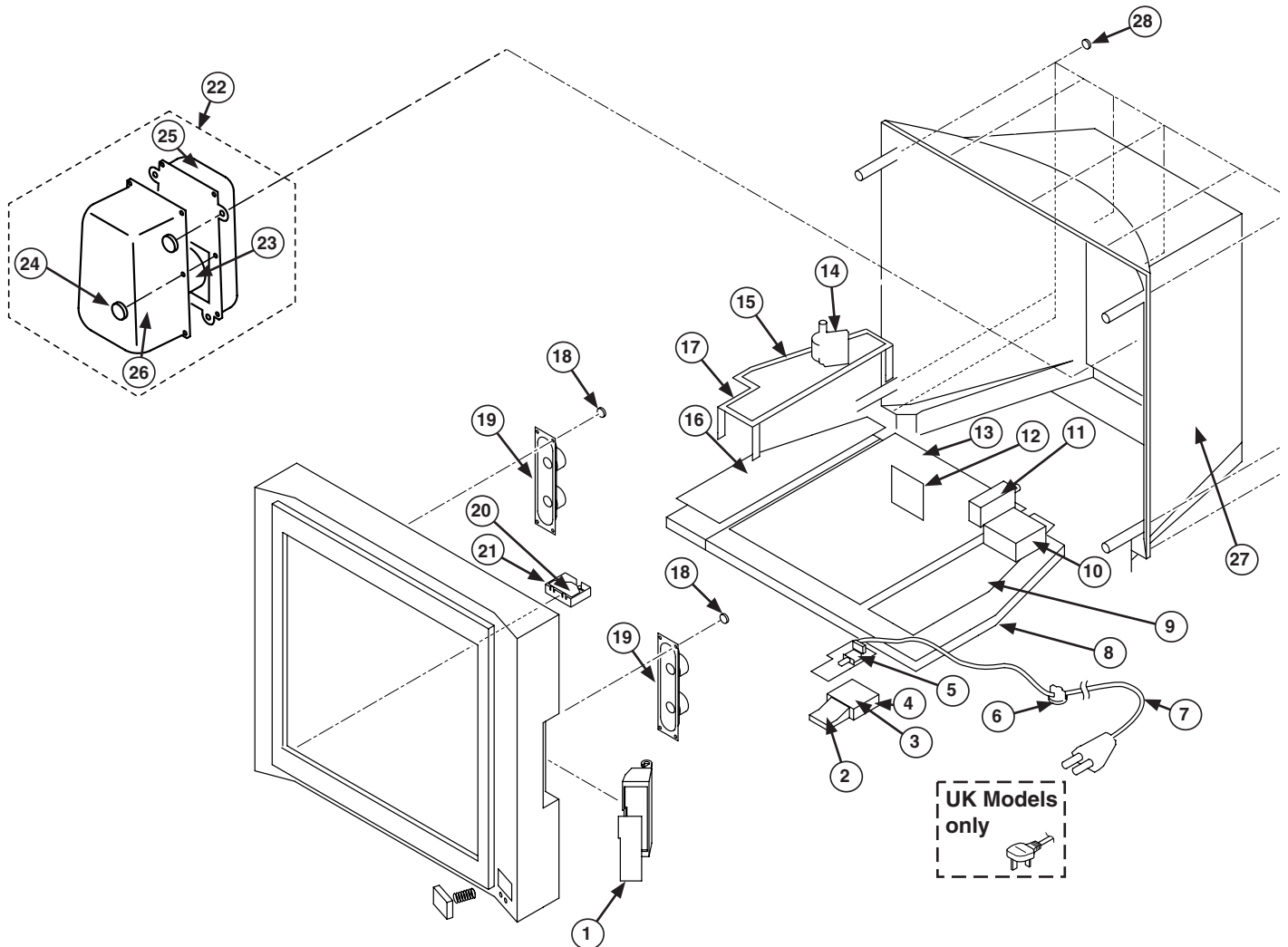
### NOTE :

- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remarks column.
- Items marked “\*” are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

### 6-1. CHASSIS

**Note :** Les composants identifiés par une trame et par une marque  $\Delta$  sont d'une importance critique pour la sécurité. Ne les remplacer que par des pièces du numéro spécifié.

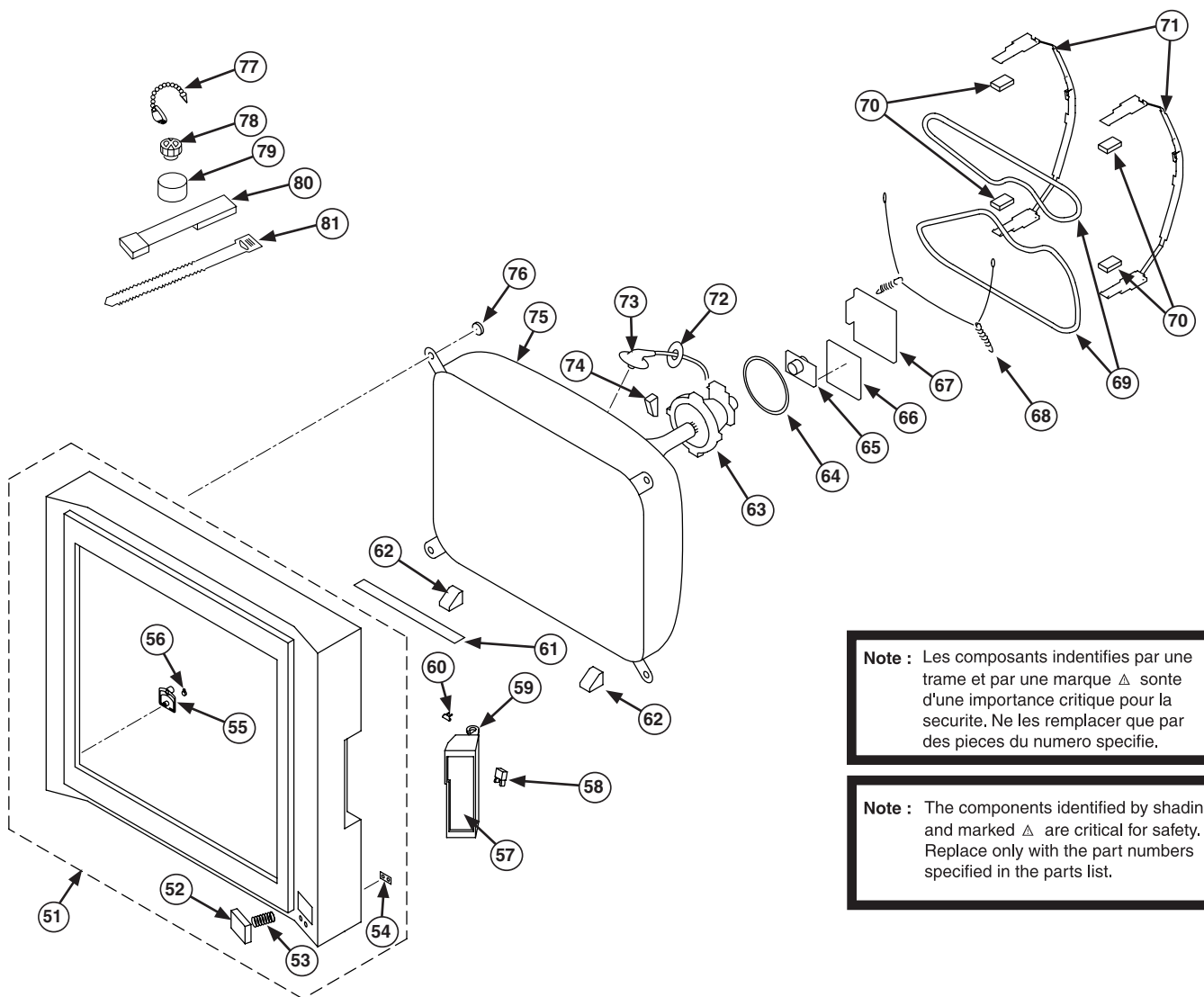
**Note :** The components identified by shading and marked  $\Delta$  are critical for safety. Replace only with the part numbers specified in the parts list.



REF.NO.	PART.NO	DESCRIPTION	REMARK	REF.NO.	PART.NO	DESCRIPTION	REMARK
1	*A-1647-043-A	H2 BOARD, COMPLETE		11	8-598-535-12	FRONTEND BTF-EF411 (KV-28FX66B/32FX66B)	
2	*A-1646-243-A	H1 BOARD, COMPLETE			8-598-533-01	FRONTEND BTF-EC411 (KV-28FX66E/32FX66E KV-32FX66K)	
3	*A-1625-000-A	F4 BOARD, COMPLETE			8-598-529-01	FRONTEND BTF-EU611 (KV-28FX66U/32FX66U)	
4	*4-206-097-01	F4, H1 BRACKET		12	*A-1400-284-A	M2 BOARD, COMPLETE	
5	$\Delta$ 1-571-433-21	SWITCH, PUSH (AC POWER)		13	*A-1300-358-A	A BOARD, COMPLETE (KV-28FX66B)	
6	*4-202-531-01	AC CORD LOCK (SC)			*A-1300-167-A	A BOARD, COMPLETE (KV-28FX66E)	
7	$\Delta$ 1-823-853-11	CORD, POWER (KV-28FX66B/28FX66E/32FX66B/ KV-32FX66E/32FX66K)			*A-1300-601-A	A BOARD, COMPLETE (KV-28FX66U)	
	$\Delta$ 1-776-860-12	POWER CORD, FILTER (UK) (KV-28FX66U/32FX66U)			*A-1300-579-A	A BOARD, COMPLETE (KV-32FX66B)	
8	*4-206-106-11	BRACKET, MAIN (KV-28FX66)			*A-1300-172-A	A BOARD, COMPLETE (KV-32FX66E/32FX66K)	
	*4-206-106-01	BRACKET, MAIN (KV-32FX66)			*A-1300-580-A	A BOARD, COMPLETE (KV-32FX66U)	
9	*A-1300-173-A	G BOARD, COMPLETE		14	$\Delta$ 1-453-378-21	TRANSFORMER ASSY, FLYBACK (NX-6020//Z214) (KV-28FX66)	
10	1-424-855-11	COIL, CHOKE 29MMH			$\Delta$ 1-453-444-11	TRANSFORMER ASSY, FLYBACK (NX-6020//Z2B4) (KV-32FX66)	

REF.NO.	PART.NO	DESCRIPTION	REMARK	REF.NO.	PART.NO	DESCRIPTION	REMARK
15	*A-1300-530-A	D2 BOARD, COMPLETE (KV-28FX66)		23	1-529-417-11	SPEAKER (8CM) (KV-28FX66)	
	*A-1300-514-A	D2 BOARD, COMPLETE (KV-32FX66)			1-529-408-11	SPEAKER (4.2x24CM) (KV-32FX66)	
16	*A-1300-168-A	D BOARD, COMPLETE (KV-28FX66)		24	4-039-358-01	SCREW (4x16), (+) BV TAPPING (KV-28FX66)	
	*A-1300-174-A	D BOARD, COMPLETE (KV-32FX66)			7-685-663-71	SCREW +BVTP 4x16 TYPE 2 IT-3 (KV-32FX66)	
17	*4-087-469-11	BRACKET, D2 (KV-28FX66)		25	*4-204-775-21	BAFFLE WOOFER (KV-28FX66)	
	*4-087-469-01	BRACKET, D2 (KV-32FX66)			*4-204-775-31	BAFFLE WOOFER (KV-32FX66)	
18	4-039-358-01	SCREW (4x16), (+) BV TAPPING (KV-28FX66)		26	*4-204-776-21	BOX WOOFER (KV-28FX66)	
	7-685-663-71	SCREW +BVTP 4x16 TYPE 2 IT-3 (KV-32FX66)			*4-204-776-31	BOX WOOFER (KV-32FX66)	
19	1-529-899-11	SPEAKER (4.2x24CM)		27	*4-205-700-31	REAR COVER (KV-28FX66)	
20	*A-1400-969-A	L BOARD, COMPLETE			*4-205-540-21	REAR COVER (KV-32FX66)	
21	*4-088-951-01	BRACKET LOCATOR		28	4-039-358-01	SCREW (4x16), (+) BV TAPPING (KV-28FX66)	
22	*A-1678-192-B	WOOFER ASSY SP (KV-28FX66)	23-26		7-685-663-79	SCREW +BVTP 4x16 TYPE 2 IT-3 (KV-32FX66)	
	*A-1603-314-A	WOOFER COMPLETE ASSY (KV-32FX66)					

## 6-2. PICTURE TUBE



**Note :** Les composants indentifiés par une trame et par une marque  $\Delta$  sont d'une importance critique pour la securite. Ne les remplacer que par des pieces du numero specifie.

**Note :** The components identified by shading and marked  $\Delta$  are critical for safety. Replace only with the part numbers specified in the parts list.

REF.NO.	PART.NO	DESCRIPTION	REMARK	REF.NO.	PART.NO	DESCRIPTION	REMARK
51	*X-4040-352-1	BEZNET ASSY (KV-28FX66)	52-56	63	$\Delta$ 8-451-521-21	DEFLECTION YOKE (Y28RVC3-B2) (KV-28FX66)	
	*X-4040-335-1	BEZNET ASSY (KV-32FX66)			$\Delta$ 1-451-480-22	DEFLECTION YOKE (Y32RVC2) (KV-32FX66)	
52	4-205-699-03	POWER BUTTON (KV-28FX66)		64	1-419-363-11	COIL, NA ROTATION (RT200) (KV-28FX66)	
	4-205-720-02	POWER BUTTON (KV-32FX66)			1-452-896-11	COIL, NA ROTATION (RT200) (KV-32FX66)	
53	4-202-964-11	SPRING (KV-28FX66)		65	8-453-011-11	NECK ASSY, (NA299-M)	
	4-204-426-01	SPRING (KV-32FX66)		66	*A-1300-627-A	VM BOARD, COMPLETE	
54	4-205-698-02	GUIDE, LIGHT		67	*A-1300-578-A	C BOARD, COMPLETE	
55	4-088-950-01	BUTTON LOCATOR		68	4-200-433-01	SPRING, EXTENSION (KV-28FX66)	
56	4-088-949-01	GUIDE LIGHT, LOCATOR			4-369-318-21	SPRING, TENSION (KV-32FX66)	
57	4-205-696-31	DOOR (KV-28FX66)		69	$\Delta$ 1-424-886-11	COIL, DEGAUSSING (KV-28FX66)	
	4-206-541-11	DOOR (KV-32FX66)			$\Delta$ 1-424-888-11	COIL, DEGAUSSING (KV-32FX66)	
58	4-047-464-01	CATCHER, PUSH		70	4-203-390-71	CUSHION, DGC (KV-28FX66)	
59	*4-205-695-02	DOOR BRACKET (KV-28FX66)			4-203-390-11	CUSHION, DGC (KV-32FX66)	
	4-206-723-02	DOOR BRACKET (KV-32FX66)		71	*4-057-303-01	HOLDER, DGC (KV-28FX66)	
60	4-025-743-01	SPRING, TORSION (KV-28FX66)			*4-204-768-01	HOLDER, DGC (29") (KV-32FX66)	
	4-025-725-01	DOOR SPRING (KV-32FX66)		72	4-202-693-01	HOLDER, HV CABLE (KV-28FX66)	
61	4-203-128-41	SHEET, BLOTTING (KV-28FX66)			*4-203-022-01	HOLDER, HV (KV-32FX66)	
	4-204-865-01	SHEET, BLOTTING (KV-32FX66)		73	$\Delta$ 1-251-946-21	CAP ASSY, HIGH-VOLTAGE (KV-28FX66)	
62	*4-203-098-01	SUPPORTER, CRT (KV-32FX66)			$\Delta$ 1-251-374-32	CAP ASSY, HIGH-VOLTAGE (KV-32FX66)	



REF.NO.	PART.NO	DESCRIPTION	REMARK	REF.NO.	PART.NO	DESCRIPTION	REMARK
74	4-203-658-01	SPACER, DY (KV-28FX66)		77	4-308-870-00	CLIP, LEAD WIRE	
	3-704-495-01	SPACER, DY (KV-32FX66)		78	1-452-094-00	MAGNET, ROTATABLE DISK; 15MM	
75	△ 8-735-099-05	PICTURE TUBE (W66LLX060X) (KV-28FX66)		79	1-452-032-00	MAGNET, DISK; 10MM	
	△ 8-735-079-05	PICTURE TUBE (W76LLZ060X) (KV-32FX66)		80	X-4387-214-1	PERMALLOY ASSY, CORRECTION	
76	4-036-188-01	SCREW SELF TAPPING		81	3-701-007-00	BAND, BINDING	
	4-046-765-12	SCREW, TAPPING 7+CROWN WASHER (KV-32FX66)					

## SECTION 7 ELECTRICAL PARTS LIST

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**Note :** Refer to the designated variant parts list when seeking a part indicated by an asterisk (\*)  
Parts indicated (XX) on the Schematic Diagram are not used in this model and therefore do not appear in the Parts List.

REF.NO.	PART.NO	DESCRIPTION	REMARK	REF.NO.	PART.NO	DESCRIPTION	REMARK
*A-1300-168-A D Board, Complete (KV-28FX66)				C8820	1-125-893-11	FILM 680PF	3.00% 1.5KV
*A-1300-174-A D Board, Complete (KV-32FX66)				C8824	1-107-846-11	FILM 0.1UF	5.00% 400V
4-382-854-01 SCREW (M3X8) , P, SW (+)				C8827	1-107-846-11	FILM 0.1UF	5.00% 400V
<b>D Board Common Parts</b>				C8828	1-127-681-11	FILM 10000PF	2% 100V
< CAPACITOR >				C8829	1-127-680-11	FILM 4700PF	2% 100V
C8100	1-136-165-00	FILM 0.1UF	5.00% 50V	C8830	1-107-655-11	ELECT 47UF	20.00% 250V
C8101	1-136-165-00	FILM 0.1UF	5.00% 50V	C8831	1-102-228-00	CERAMIC 470PF	10.00% 500V
C8102	1-136-165-00	FILM 0.1UF	5.00% 50V	C8832	1-126-941-11	ELECT 470UF	20.00% 25V
C8103	1-115-416-11	CERAMIC CHIP 0.001UF	5.00% 25V	C8833	1-126-941-11	ELECT 470UF	20.00% 25V
C8104	1-115-416-11	CERAMIC CHIP 0.001UF	5.00% 25V	C8834	1-102-228-00	CERAMIC 470PF	10.00% 500V
C8105	1-126-947-11	ELECT 47UF	20.00% 35V	C8835	1-102-228-00	CERAMIC 470PF	10.00% 500V
C8108	1-162-970-11	CERAMIC CHIP 0.01UF	10.00% 25V	C8836	1-123-024-21	ELECT 33UF	160V
C8109	1-126-947-11	ELECT 47UF	20.00% 35V	C8841	1-126-947-11	ELECT 47UF	20.00% 35V
C8112	1-164-227-11	CERAMIC CHIP 0.022UF	10.00% 25V	C8844	1-115-513-21	FILM 0.18UF	5.00% 250V
C8113	1-162-970-11	CERAMIC CHIP 0.01UF	10.00% 25V	C8860	1-162-964-11	CERAMIC CHIP 0.001UF	10.00% 50V
C8114	1-126-964-11	ELECT 10UF	20.00% 50V	C8861	1-162-927-11	CERAMIC CHIP 100PF	5.00% 50V
C8115	1-162-962-11	CERAMIC CHIP 470PF	10.00% 50V	< CONNECTOR >			
C8116	1-115-416-11	CERAMIC CHIP 0.001UF	5.00% 25V	CN8600	*1-564-509-11	PLUG, CONNECTOR 6P	
C8117	1-115-416-11	CERAMIC CHIP 0.001UF	5.00% 25V	CN8601	*1-564-506-11	PLUG, CONNECTOR 3P	
C8118	1-162-970-11	CERAMIC CHIP 0.01UF	10.00% 25V	CN8611	*1-785-270-12	PIN, DY CONNECTOR (PC BOARD)	
C8119	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V	CN8612	*1-564-511-11	PLUG, CONNECTOR 8P	
C8124	1-125-891-11	CERAMIC CHIP 0.47UF	10.00% 10V	CN8614	*1-564-508-11	PLUG, CONNECTOR 5P	
C8125	1-162-968-11	CERAMIC CHIP 0.0047UF	10.00% 50V	CN8616	1-695-915-11	TAB (CONTACT)	
C8126	1-165-176-11	CERAMIC CHIP 0.047UF	10.00% 16V	CN8620	1-764-333-11	PLUG, CONNECTOR 10P	
C8128	1-162-968-11	CERAMIC CHIP 0.0047UF	10.00% 50V	CN8810	*1-564-510-11	PLUG, CONNECTOR 7P	
C8131	1-126-964-11	ELECT 10UF	20.00% 50V	< DIODE >			
C8132	1-164-230-11	CERAMIC CHIP 220PF	5.00% 50V	D8102	8-719-081-97	DIODE MMDL914T1	
C8134	1-102-935-00	CERAMIC 2PF	0.25PF 50V	D8103	8-719-081-97	DIODE MMDL914T1	
C8135	1-126-964-11	ELECT 10UF	20.00% 50V	D8104	8-719-081-97	DIODE MMDL914T1	
C8136	1-126-964-11	ELECT 10UF	20.00% 50V	D8105	8-719-081-97	DIODE MMDL914T1	
C8209	1-164-315-11	CERAMIC CHIP 470PF	5.00% 50V	D8107	8-719-081-97	DIODE MMDL914T1	
C8210	1-162-964-11	CERAMIC CHIP 0.001UF	10.00% 50V	D8108	8-719-921-40	DIODE MT2J-4.7C	
C8801	1-126-947-11	ELECT 47UF	20.00% 35V	D8128	8-719-081-97	DIODE MMDL914T1	
C8802	1-126-960-11	ELECT 1UF	20.00% 50V	D8132	8-719-081-97	DIODE MMDL914T1	
C8803	1-126-960-11	ELECT 1UF	20.00% 50V	D8133	8-719-081-97	DIODE MMDL914T1	
C8804	1-102-114-00	CERAMIC 470PF	10.00% 50V	D8199	8-719-081-97	DIODE MMDL914T1	
C8805	1-102-114-00	CERAMIC 470PF	10.00% 50V	D8611	8-719-081-97	DIODE MMDL914T1	
C8808	1-102-030-00	CERAMIC 330PF	10.00% 500V	D8612	8-719-081-97	DIODE MMDL914T1	
C8809	1-102-030-00	CERAMIC 330PF	10.00% 500V	D8803	8-719-200-02	DIODE 10E-2	
C8810	1-107-368-11	MYLAR 0.047UF	10.00% 200V	D8805	8-719-302-43	DIODE EL1Z	
C8811	1-107-368-11	MYLAR 0.047UF	10.00% 200V	D8806	8-719-979-85	DIODE EGP20G	
C8812	1-162-131-11	CERAMIC 220PF	10.00% 2KV	D8807	8-719-510-73	DIODE S3L20UF4	
C8813	1-162-134-11	CERAMIC 470PF	10.00% 2KV	D8808	8-719-510-73	DIODE S3L20UF4	
C8816	1-162-964-11	CERAMIC CHIP 0.001UF	10.00% 50V	D8811	8-719-110-41	DIODE RD15ESB2	
C8817	1-125-893-11	FILM 680PF	3.00% 1.5KV	D8818	8-719-109-89	DIODE RD5.6ESB2	
C8818	1-125-893-11	FILM 680PF	3.00% 1.5KV	D8819	8-719-050-38	DIODE M1MA152WK-T1	
C8819	1-125-893-11	FILM 680PF	3.00% 1.5KV	D8820	8-719-081-97	DIODE MMDL914T1	

REF.NO.	PART.NO	DESCRIPTION	REMARK	REF.NO.	PART.NO	DESCRIPTION	REMARK
D8859	8-719-081-97	DIODE MMDL914T1		Q8801	8-729-048-47	TRANSISTOR 2SC2688 (5) -LK	
	< FERRITE BEAD >			Q8802	8-729-048-47	TRANSISTOR 2SC2688 (5) -LK	
FB8807	1-410-397-21	FERRITE 1.1UH		Q8803	8-729-056-16	TRANSISTOR 2SC5698-SONY-CA	
	< IC >			Q8804	8-729-056-17	TRANSISTOR 2SC5696-SONY-CA	
IC8100	8-759-659-67	IC LA6393DLL		Q8805	8-729-050-48	TRANSISTOR IRF614-005	
IC8101	8-759-659-67	IC LA6393DLL		Q8806	8-729-047-59	TRANSISTOR STP5NB40FP	
IC8102	8-759-638-79	IC NJM3404AD-W		Q8807	8-729-421-19	TRANSISTOR UN2213	
IC8103	8-759-659-67	IC LA6393DLL		Q8822	8-729-010-29	TRANSISTOR MSD601-RST1	
	< COIL >			Q8823	8-729-424-08	TRANSISTOR UN2111	
L8801	1-410-397-21	FERRITE 1.1UH			< RESISTOR >		
L8802	1-410-397-21	FERRITE 1.1UH		R8100	1-216-813-11	RES-CHIP 220 5% 1/10W	
L8803	1-410-397-21	FERRITE 1.1UH		R8101	1-216-813-11	RES-CHIP 220 5% 1/10W	
	< INDUCTOR >			R8102	1-216-825-11	RES-CHIP 2.2K 5% 1/10W	
LF8801	1-406-985-11	INDUCTOR 2.2MH		R8103	1-216-825-11	RES-CHIP 2.2K 5% 1/10W	
	< TRANSISTOR >			R8104	1-216-825-11	RES-CHIP 2.2K 5% 1/10W	
Q8100	8-729-010-29	TRANSISTOR MSD601-RST1		R8105	1-216-821-11	RES-CHIP 1K 5% 1/10W	
Q8101	8-729-010-29	TRANSISTOR MSD601-RST1		R8106	1-216-825-11	RES-CHIP 2.2K 5% 1/10W	
Q8102	8-729-010-29	TRANSISTOR MSD601-RST1		R8107	1-208-792-11	METAL CHIP 2.7K 0.5% 1/10W	
Q8103	8-729-010-29	TRANSISTOR MSD601-RST1		R8108	1-208-792-11	METAL CHIP 2.7K 0.5% 1/10W	
Q8104	8-729-010-29	TRANSISTOR MSD601-RST1		R8109	1-208-814-91	METAL CHIP 22K 0.5% 1/10W	
Q8105	8-729-010-29	TRANSISTOR MSD601-RST1		R8110	1-208-814-91	METAL CHIP 22K 0.5% 1/10W	
Q8106	8-729-010-29	TRANSISTOR MSD601-RST1		R8111	1-216-825-11	RES-CHIP 2.2K 5% 1/10W	
Q8107	8-729-010-29	TRANSISTOR MSD601-RST1		R8112	1-216-825-11	RES-CHIP 2.2K 5% 1/10W	
Q8108	8-729-010-05	TRANSISTOR MSB709-RT1		R8113	1-216-833-11	RES-CHIP 10K 5% 1/10W	
Q8110	8-729-010-05	TRANSISTOR MSB709-RT1		R8114	1-216-833-11	RES-CHIP 10K 5% 1/10W	
Q8112	8-729-010-29	TRANSISTOR MSD601-RST1		R8115	1-216-845-11	RES-CHIP 100K 5% 1/10W	
Q8113	8-729-010-29	TRANSISTOR MSD601-RST1		R8116	1-216-845-11	RES-CHIP 100K 5% 1/10W	
Q8115	8-729-010-05	TRANSISTOR MSB709-RT1		R8117	1-216-833-11	RES-CHIP 10K 5% 1/10W	
Q8118	8-729-010-29	TRANSISTOR MSD601-RST1		R8118	1-216-833-11	RES-CHIP 10K 5% 1/10W	
Q8119	8-729-010-05	TRANSISTOR MSB709-RT1		R8119	1-216-833-11	RES-CHIP 10K 5% 1/10W	
Q8120	8-729-010-05	TRANSISTOR MSB709-RT1		R8120	1-216-825-11	RES-CHIP 2.2K 5% 1/10W	
Q8122	8-729-010-05	TRANSISTOR MSB709-RT1		R8121	1-216-825-11	RES-CHIP 2.2K 5% 1/10W	
Q8123	8-729-010-05	TRANSISTOR MSB709-RT1		R8122	1-216-825-11	RES-CHIP 2.2K 5% 1/10W	
Q8125	8-729-010-29	TRANSISTOR MSD601-RST1		R8123	1-216-841-11	RES-CHIP 47K 5% 1/10W	
Q8126	8-729-010-05	TRANSISTOR MSB709-RT1		R8124	1-216-821-11	RES-CHIP 1K 5% 1/10W	
Q8127	8-729-010-05	TRANSISTOR MSB709-RT1		R8125	1-216-825-11	RES-CHIP 2.2K 5% 1/10W	
Q8128	8-729-010-29	TRANSISTOR MSD601-RST1		R8126	1-216-815-11	RES-CHIP 330 5% 1/10W	
Q8132	8-729-421-19	TRANSISTOR UN2213		R8128	1-208-822-11	METAL CHIP 47K 0.5% 1/10W	
Q8135	8-729-010-29	TRANSISTOR MSD601-RST1		R8129	1-208-822-11	METAL CHIP 47K 0.5% 1/10W	
Q8136	8-729-010-05	TRANSISTOR MSB709-RT1		R8130	1-208-846-11	METAL CHIP 470K 0.5% 1/10W	
Q8137	8-729-010-29	TRANSISTOR MSD601-RST1		R8131	1-216-815-11	RES-CHIP 330 5% 1/10W	
Q8201	8-729-010-29	TRANSISTOR MSD601-RST1		R8132	1-216-815-11	RES-CHIP 330 5% 1/10W	
Q8202	8-729-010-29	TRANSISTOR MSD601-RST1		R8133	1-216-815-11	RES-CHIP 330 5% 1/10W	
Q8455	8-729-010-29	TRANSISTOR MSD601-RST1		R8136	1-208-822-11	METAL CHIP 47K 0.5% 1/10W	
				R8137	1-208-822-11	METAL CHIP 47K 0.5% 1/10W	
				R8138	1-208-822-11	METAL CHIP 47K 0.5% 1/10W	
				R8139	1-208-822-11	METAL CHIP 47K 0.5% 1/10W	
				R8140	1-216-825-11	RES-CHIP 2.2K 5% 1/10W	
				R8143	1-216-825-11	RES-CHIP 2.2K 5% 1/10W	

REF.NO.	PART.NO	DESCRIPTION	REMARK	REF.NO.	PART.NO	DESCRIPTION	REMARK
R8145	1-216-825-11	RES-CHIP	2.2K 5% 1/10W	R8835	1-260-288-11	CARBON	0.47 5% 1/2W
R8146	1-208-790-11	METAL CHIP	2.2K 0.5% 1/10W	R8842	1-260-328-11	CARBON	1K 5% 1/2W
R8153	1-216-295-91	SHORT CHIP	0	R8844	1-216-838-11	RES-CHIP	27K 5% 1/10W
R8160	1-216-295-91	SHORT CHIP	0	R8845	1-216-833-11	RES-CHIP	10K 5% 1/10W
R8162	1-216-821-11	RES-CHIP	1K 5% 1/10W	R8865	1-216-829-11	RES-CHIP	4.7K 5% 1/10W
R8163	1-216-833-11	RES-CHIP	10K 5% 1/10W	R8866	1-216-295-91	SHORT CHIP	0
R8164	1-208-814-91	METAL CHIP	22K 0.5% 1/10W	R8867	1-216-829-11	RES-CHIP	4.7K 5% 1/10W
R8165	1-208-830-11	METAL CHIP	100K 0.5% 1/10W	R8885	1-208-854-11	METAL CHIP	1M 0.5% 1/10W
R8168	1-216-829-11	RES-CHIP	4.7K 5% 1/10W	R8887	1-216-841-11	RES-CHIP	47K 5% 1/10W
R8169	1-208-830-11	METAL CHIP	100K 0.5% 1/10W	R8888	1-249-441-11	CARBON	100K 5% 1/4W
R8170	1-216-815-11	RES-CHIP	330 5% 1/10W	R8895	1-249-443-11	CARBON	0.47 5% 1/4W
R8171	1-216-825-11	RES-CHIP	2.2K 5% 1/10W	R8896	1-249-443-11	CARBON	0.47 5% 1/4W
R8174	1-216-837-11	RES-CHIP	22K 5% 1/10W	R8898	1-215-493-00	METAL	1M 1% 1/4W
R8180	1-216-825-11	RES-CHIP	2.2K 5% 1/10W	R8899	1-215-493-00	METAL	1M 1% 1/4W
R8181	1-216-295-91	SHORT CHIP	0	< TRANSFORMER >			
R8182	1-216-841-11	RES-CHIP	47K 5% 1/10W	T8801	1-437-430-11	TRANSFORMER, FERRITE (HDT)	
R8183	1-216-825-11	RES-CHIP	2.2K 5% 1/10W	T8802	1-437-430-11	TRANSFORMER, FERRITE (HDT)	
R8188	1-216-829-11	RES-CHIP	4.7K 5% 1/10W	T8806	1-437-614-11	TRANSFORMER, HORIZONTAL OUTPUT	
R8190	1-216-825-11	RES-CHIP	2.2K 5% 1/10W	<b>D Board Variant Parts KV-28FX66</b>			
R8191	1-215-925-11	METAL OXIDE	22K 5% 3W	< CAPACITOR >			
R8196	1-249-377-11	CARBON	0.47 5% 1/4W	C8106	1-162-964-11	CERAMIC CHIP	0.001UF 10.00% 50V
R8197	1-216-841-11	RES-CHIP	47K 5% 1/10W	C8107	NOT FITTED		
R8209	1-216-295-91	SHORT CHIP	0	C8130	1-164-230-11	CERAMIC CHIP	220PF 5.00% 50V
R8210	1-216-825-11	RES-CHIP	2.2K 5% 1/10W	C8814	1-117-641-11	FILM	7500PF 3.00% 1.2KV
R8211	1-216-833-11	RES-CHIP	10K 5% 1/10W	C8815	1-117-836-11	FILM	6800PF 3.00% 1.5KV
R8212	1-216-825-11	RES-CHIP	2.2K 5% 1/10W	C8825	1-117-663-11	FILM	0.22UF 5.00% 250V
R8217	1-216-833-11	RES-CHIP	10K 5% 1/10W	C8826	1-115-520-11	FILM	0.68UF 5.00% 250V
R8456	1-216-845-11	RES-CHIP	100K 5% 1/10W	< RESISTOR >			
R8457	1-216-834-11	RES-CHIP	12K 5% 1/10W	R8127	1-208-798-11	METAL CHIP	4.7K 0.5% 1/10W
R8458	1-216-841-11	RES-CHIP	47K 5% 1/10W	R8141	1-208-814-91	METAL CHIP	22K 0.5% 1/10W
R8459	1-216-825-11	RES-CHIP	2.2K 5% 1/10W	R8142	1-208-803-11	METAL CHIP	7.5K 0.5% 1/10W
R8800	1-247-895-91	CARBON	470K 5% 1/4W	R8149	1-216-837-11	RES-CHIP	22K 5% 1/10W
R8804	1-249-408-11	CARBON	180 5% 1/4W	R8150	1-216-837-11	RES-CHIP	22K 5% 1/10W
R8805	1-249-408-11	CARBON	180 5% 1/4W	R8154	1-216-830-11	RES-CHIP	5.6K 5% 1/10W
R8806	1-249-411-11	CARBON	330 5% 1/4W	R8155	1-208-798-11	METAL CHIP	4.7K 0.5% 1/10W
R8807	1-249-411-11	CARBON	330 5% 1/4W	R8158	1-208-790-11	METAL CHIP	2.2K 0.5% 1/10W
R8808	1-260-340-11	CARBON	10K 5% 1/2W	R8159	1-208-790-11	METAL CHIP	2.2K 0.5% 1/10W
R8809	1-260-340-11	CARBON	10K 5% 1/2W	R8161	1-208-802-11	METAL CHIP	6.8K 0.5% 1/10W
R8811	1-215-896-00	METAL OXIDE	4.7K 5% 2W	R8175	1-216-829-11	RES-CHIP	4.7K 5% 1/10W
R8812	1-215-896-00	METAL OXIDE	4.7K 5% 2W	R8176	1-216-864-11	SHORT CHIP	0
R8813	1-215-895-11	METAL OXIDE	3.3K 5% 2W	R8177	1-216-830-11	RES-CHIP	5.6K 5% 1/10W
R8814	1-215-880-00	METAL OXIDE	10 5% 2W	R8179	1-216-829-11	RES-CHIP	4.7K 5% 1/10W
R8815	1-215-880-00	METAL OXIDE	10 5% 2W	R8186	1-216-826-11	RES-CHIP	2.7K 5% 1/10W
R8816	1-216-365-00	METAL OXIDE	0.47 5% 2W	R8189	1-216-823-11	RES-CHIP	1.5K 5% 1/10W
R8817	1-216-361-00	METAL OXIDE	0.22 5% 2W	R8203	1-218-867-11	METAL CHIP	6.8K 0.5% 1/10W
R8818	1-249-405-11	CARBON	100 5% 1/4W	R8215	1-208-814-91	METAL CHIP	22K 0.5% 1/10W
R8819	1-247-807-31	CARBON	100 5% 1/4W				
R8831	1-260-124-11	CARBON	120K 5% 1/2W				
R8833	1-202-972-61	FUSIBLE	1 5% 1/4W				
R8834	1-260-288-11	CARBON	0.47 5% 1/2W				

**Note :** The components identified by shading and marked  $\Delta$  are critical for safety. Replace only with the part numbers specified in the parts list.

**D**

**G**

REF.NO.	PART.NO	DESCRIPTION	REMARK
R8216	1-216-841-11	RES-CHIP 47K 5%	1/10W
R8810	1-215-896-00	METAL OXIDE 4.7K 5%	2W
R8897	1-215-485-00	METAL 470K 1%	1/4W

#### D Board Variant Parts KV-32FX66

##### < CAPACITOR >

C8106	1-164-315-11	CERAMIC CHIP 470PF 5.00%	50V
C8107	1-216-685-11	METAL CHIP 27K 0.5%	1/10W
C8130	NOT FITTED		
C8814	1-117-640-11	FILM 6800PF 3.00%	1.2KV
C8815	1-117-835-11	FILM 6200PF 3.00%	1.5KV
C8825	1-117-662-11	FILM 0.18UF 5.00%	250V
C8826	1-115-519-11	FILM 0.56UF 5.00%	250V

##### < RESISTOR >

R8127	1-208-802-11	METAL CHIP 6.8K 0.5%	1/10W
R8141	1-208-818-11	METAL CHIP 33K 0.5%	1/10W
R8142	1-208-798-11	METAL CHIP 4.7K 0.5%	1/10W
R8149	1-216-828-11	RES-CHIP 3.9K 5%	1/10W
R8150	1-218-867-11	METAL CHIP 6.8K 0.5%	1/10W
R8154	1-208-784-11	METAL CHIP 1.2K 0.5%	1/10W
R8155	1-216-059-00	RES-CHIP 2.7K 5%	1/10W
R8158	1-208-798-11	METAL CHIP 4.7K 0.5%	1/10W
R8159	1-216-295-91	SHORT CHIP 0	
R8161	1-208-804-11	METAL CHIP 8.2K 0.5%	1/10W
R8175	1-218-867-11	METAL CHIP 6.8K 0.5%	1/10W
R8176	1-216-833-11	RES-CHIP 10K 5%	1/10W
R8177	1-216-829-11	RES-CHIP 4.7K 5%	1/10W
R8179	1-216-829-91	SHORT CHIP 0	
R8186	1-216-827-11	RES-CHIP 3.3K 5%	1/10W
R8189	1-216-818-11	RES-CHIP 560 5%	1/10W
R8203	1-216-295-91	SHORT CHIP 0	
R8215	1-208-822-11	METAL CHIP 4.7K 0.5%	1/10W
R8216	1-208-822-11	METAL CHIP 47K 0.5%	1/10W
R8810	1-216-460-11	METAL OXIDE 3.9K 5%	2W
R8886	1-208-834-11	METAL CHIP 150K 0.5%	1/10W
R8897	1-215-489-00	METAL 680K 1%	1/4W

#### \*A-1300-173-A G Board, Complete

4-382-854-01 SCREW (M3X8), P, SW (+)

##### < CAPACITOR >

C6001 $\Delta$	1-137-999-11	FILM 0.1UF	275V
C6002 $\Delta$	1-137-999-11	FILM 0.1UF	275V
C6003 $\Delta$	1-119-899-51	CERAMIC 1000PF	10.00% 250V
C6004 $\Delta$	1-119-899-51	CERAMIC 1000PF	10.00% 250V
C6005	1-126-965-91	ELECT 22UF	20.00% 50V
C6006	1-117-753-11	ELECT(BLOCK) 470UF	20.00% 450V

REF.NO.	PART.NO	DESCRIPTION	REMARK
C6007	1-126-964-11	ELECT 10UF	20.00% 50V
C6008	1-126-963-11	ELECT 4.7UF	20.00% 50V
C6010	1-136-165-00	FILM 0.1UF	5.00% 50V
C6011	1-162-964-11	CERAMIC CHIP 0.001UF	10.00% 50V
C6012 $\Delta$	1-161-830-00	CERAMIC 0.0047UF	500V

C6013 $\Delta$	1-161-830-00	CERAMIC 0.0047UF	500V
C6014	1-113-610-11	ELECT(BLOCK) 220UF	20.00% 250V
C6015	1-115-339-11	CERAMIC CHIP 0.1UF	10.00% 50V
C6016	1-161-830-00	CERAMIC 0.0047UF	500V
C6017	1-161-830-00	CERAMIC 0.0047UF	500V

C6018	1-126-949-11	ELECT 220UF	20.00% 35V
C6020	1-135-946-21	FILM 47000PF	3% 800V
C6021	1-164-645-11	CERAMIC 1000PF	10.00% 500V
C6022	1-126-963-11	ELECT 4.7UF	20.00% 50V
C6023	1-110-626-11	ELECT 330UF	20.00% 160V

C6024	1-164-625-11	CERAMIC 680PF	10.00% 500V
C6025	1-164-625-11	CERAMIC 680PF	10.00% 500V
C6026	1-164-625-11	CERAMIC 680PF	10.00% 500V
C6027	1-164-625-11	CERAMIC 680PF	10.00% 500V
C6028	1-128-548-11	ELECT 4700UF	20.00% 25V

C6029	1-126-939-11	ELECT 10000UF	20.00% 16V
C6030	1-119-940-51	ELECT 4700UF	20.00% 50V
C6031	1-535-143-71	LEAD, JUMPER (7.5MM)	
C6032 $\Delta$	1-113-927-11	CERAMIC 0.01UF	250V
C6033	1-162-964-11	CERAMIC CHIP 0.001UF	10.00% 50V

C6034	1-162-968-11	CERAMIC CHIP 0.0047UF	10.00% 50V
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C6035	1-136-165-00	FILM 0.1UF	5.00% 50V
C6036	1-136-479-11	FILM 0.001UF	5.00% 100V
C6037	1-126-947-11	ELECT 47UF	20.00% 35V
C6038	1-164-645-11	CERAMIC 1000PF	10.00% 500V
C6039	1-125-891-11	CERAMIC CHIP 0.47UF	10.00% 10V

C6040	1-115-340-11	CERAMIC CHIP 0.22UF	10.00% 25V
C6045	1-115-339-11	CERAMIC CHIP 0.1UF	10.00% 50V
C6102	1-126-943-11	ELECT 2200UF	20.00% 25V
C6103	1-126-971-11	ELECT 470UF	20.00% 50V
C6105	1-126-964-11	ELECT 10UF	20.00% 50V

C6106	1-126-964-11	ELECT 10UF	20.00% 50V
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##### < CONNECTOR >

CN6001 $\Delta$	*1-691-291-11	PIN, CONNECTOR (PC BOARD) 5P
CN6002 $\Delta$	*1-508-786-00	PIN, CONNECTOR (5MM PITCH) 2P
CN6003 $\Delta$	*1-508-765-00	PIN, CONNECTOR (5MM PITCH) 3P
CN6004 $\Delta$	*1-691-960-11	PIN, CONNECTOR (PC BOARD) 3P
CN6005	*1-564-509-11	PLUG, CONNECTOR 6P

CN6006	*1-564-516-11	PLUG, CONNECTOR 13P
CN6008	*1-564-507-11	PLUG, CONNECTOR 4P
CN6010	*1-564-511-11	PLUG, CONNECTOR 8P



**Note :** The components identified by shading and marked  $\Delta$  are critical for safety. Replace only with the part numbers specified in the parts list.

**G**

REF.NO.	PART.NO	DESCRIPTION	REMARK	REF.NO.	PART.NO	DESCRIPTION	REMARK
< DIODE >				< TRANSISTOR >			
D6001	6-500-067-01	DIODE GSIB460L/45		Q6003	8-729-010-29	TRANSISTOR MSD601-RST1	
D6002	8-719-982-26	DIODE MT2J-33B		Q6005	8-729-029-56	TRANSISTOR DTA144ESA	
D6004	8-719-979-64	DIODE UF4005PKG23		Q6006	6-550-146-01	TRANSISTOR SPA07N60C2-E8152	
D6006	8-719-081-97	DIODE MMDL914T1		Q6007	6-550-146-01	TRANSISTOR SPA07N60C2-E8152	
D6007	8-719-081-97	DIODE MMDL914T1		Q6010	8-729-119-78	TRANSISTOR 2SC2785-HFE	
D6008	8-719-063-70	DIODE D1NL20U		Q6101	8-729-029-56	TRANSISTOR DTA144ESA	
D6009	8-719-110-41	DIODE RD15ESB2		Q6102	8-729-010-29	TRANSISTOR MSD601-RST1	
D6010	8-719-085-24	DIODE FBIU4D7M1-B		Q6103	8-729-029-56	TRANSISTOR DTA144ESA	
D6011	8-719-033-12	DIODE S3L40F		Q6104	8-729-010-29	TRANSISTOR MSD601-RST1	
D6012	8-719-033-12	DIODE S3L40F		Q6105	8-729-010-29	TRANSISTOR MSD601-RST1	
D6016	8-719-060-88	DIODE D4SBS6		< RESISTOR >			
D6031	8-719-080-59	DIODE EK19-V0		R6003 $\Delta$	1-202-933-61	FUSIBLE 0.1 10% 1/2W	
D6032	8-719-080-59	DIODE EK19-V0		R6004 $\Delta$	1-205-998-11	CEMENTED 1 5% 10W	
D6033	8-719-022-97	DIODE D2S4MF		R6005 $\Delta$	1-205-998-11	CEMENTED 1 5% 10W	
D6034	8-719-022-97	DIODE D2S4MF		R6006 $\Delta$	1-205-998-11	CEMENTED 1 5% 10W	
D6101	8-719-081-97	DIODE MMDL914T1		R6007	1-243-979-21	METAL OXIDE 0.1 5% 2W	
D6102	8-719-511-40	DIODE S1VB40		R6008	1-243-979-21	METAL OXIDE 0.1 5% 2W	
D6103	8-719-081-97	DIODE MMDL914T1		R6009	1-208-810-11	METAL CHIP 15K 0.5% 1/10W	
D6104	8-719-081-97	DIODE MMDL914T1		R6010	1-215-481-00	METAL 330K 1% 1/4W	
D6105	8-719-081-97	DIODE MMDL914T1		R6013 $\Delta$	1-218-265-11	METAL 8.2M 5% 1W	
D6106	8-719-081-97	DIODE MMDL914T1		R6014	1-215-926-00	METAL OXIDE 33K 5% 3W	
D6107	8-719-081-97	DIODE MMDL914T1		R6015	1-208-757-11	METAL CHIP 91 0.5% 1/10W	
< FERRITE BEAD >				R6016	1-216-821-11	RES-CHIP 1K 5% 1/10W	
FB6001	1-410-397-21	FERRITE 1.1UH		R6017	1-216-833-11	RES-CHIP 10K 5% 1/10W	
FB6002	1-410-397-21	FERRITE 1.1UH		R6018	1-260-131-11	CARBON 470K 5% 1/2W	
FB6003	1-410-397-21	FERRITE 1.1UH		R6019	1-260-130-81	CARBON 390K 5% 1/2W	
FB6004	1-410-397-21	FERRITE 1.1UH		R6020	1-216-820-11	RES-CHIP 820 5% 1/10W	
FB6006	1-535-143-61	LEAD, JUMPER (5.0MM)		R6021	1-216-362-11	METAL OXIDE 0.27 5% 2W	
< IC >				R6022	1-216-833-11	RES-CHIP 10K 5% 1/10W	
IC6001	8-759-670-30	IC MCZ3001D		R6024	1-216-615-11	METAL CHIP 33 0.5% 1/10W	
IC6003	8-749-016-19	IC SE135N-LF4		R6029	1-216-833-11	RES-CHIP 10K 5% 1/10W	
< COIL >				R6030	1-216-817-11	RES-CHIP 470 5% 1/10W	
L6001	1-406-663-21	INDUCTOR 47UH		R6032	1-249-417-11	CARBON 1K 5% 1/4W	
L6002	1-412-527-11	INDUCTOR 15UH		R6033	1-215-481-00	METAL 330K 1% 1/4W	
L6003	1-412-527-11	INDUCTOR 15UH		R6034	1-249-389-11	CARBON 4.7 5% 1/4W	
L6004	1-535-143-61	LEAD, JUMPER (5.0MM)		R6035	1-260-083-11	CARBON 47 5% 1/2W	
L6005	1-535-143-61	LEAD, JUMPER (5.0MM)		R6036	1-216-817-11	RES-CHIP 470 5% 1/10W	
L6006	1-406-659-11	INDUCTOR 10UH		R6037	1-249-405-11	CARBON 100 5% 1/4W	
L6007	1-412-525-31	INDUCTOR 10UH		R6038	1-208-830-11	METAL CHIP 100K 0.5% 1/10W	
L6008	1-406-670-11	INDUCTOR 680UH		R6039	1-208-830-11	METAL CHIP 100K 0.5% 1/10W	
< PHOTOCOUPLER >				R6040	1-208-814-91	METAL CHIP 22K 0.5% 1/10W	
PH6001 $\Delta$	8-749-016-21	IC TCET1103G		R6042	1-216-295-91	SHORT CHIP 0	
				R6045	1-216-639-11	METAL CHIP 330 0.5% 1/10W	
				R6047	1-208-842-11	METAL CHIP 330K 0.5% 1/10W	
				R6048	1-215-481-00	METAL 330K 1% 1/4W	
				R6049	1-208-805-11	METAL CHIP 9.1K 0.5% 1/10W	
				R6050	1-208-758-11	METAL CHIP 100 0.5% 1/10W	



**Note :** The components identified by shading and marked  $\Delta$  are critical for safety. Replace only with the part numbers specified in the parts list.

**G**

**A**

REF.NO.	PART.NO	DESCRIPTION	REMARK	REF.NO.	PART.NO	DESCRIPTION	REMARK
R6054	1-216-615-11	METAL CHIP	33 0.5% 1/10W	C2001	1-162-968-11	CERAMIC CHIP 0.0047UF	10.00% 50V
R6056	1-216-295-91	SHORT CHIP	0	C2006	1-162-962-11	CERAMIC CHIP 470PF	10.00% 50V
R6101	1-216-821-11	RES-CHIP	1K 5% 1/10W	C2007	1-163-021-91	CERAMIC CHIP 0.01UF	10.00% 50V
R6102	1-216-829-11	RES-CHIP	4.7K 5% 1/10W	C2008	1-162-964-11	CERAMIC CHIP 0.001UF	10.00% 50V
R6103	1-216-821-11	RES-CHIP	1K 5% 1/10W	C2009	1-163-021-91	CERAMIC CHIP 0.01UF	10.00% 50V
R6104	1-216-821-11	RES-CHIP	1K 5% 1/10W	C2010	1-162-964-11	CERAMIC CHIP 0.001UF	10.00% 50V
R6105	1-216-821-11	RES-CHIP	1K 5% 1/10W	C2011	1-162-962-11	CERAMIC CHIP 470PF	10.00% 50V
R6106	1-216-829-11	RES-CHIP	4.7K 5% 1/10W	C2012	1-162-962-11	CERAMIC CHIP 470PF	10.00% 50V
R6107	1-216-829-11	RES-CHIP	4.7K 5% 1/10W	C2013	1-162-962-11	CERAMIC CHIP 470PF	10.00% 50V
R6108	1-216-821-11	RES-CHIP	1K 5% 1/10W	C2014	1-164-346-11	CERAMIC CHIP 1UF	16V
R6109	1-216-829-11	RES-CHIP	4.7K 5% 1/10W	C2015	1-163-021-91	CERAMIC CHIP 0.01UF	10.00% 50V
R6110	1-216-821-11	RES-CHIP	1K 5% 1/10W	C2016	1-162-962-11	CERAMIC CHIP 470PF	10.00% 50V
< RELAY >				C2018	1-162-962-11	CERAMIC CHIP 470PF	10.00% 50V
RY6001 $\Delta$	1-755-395-11	RELAY (AC POWER)		C2019	1-164-346-11	CERAMIC CHIP 1UF	16V
RY6002 $\Delta$	1-755-389-11	RELAY (AC POWER)		C2021	1-162-962-11	CERAMIC CHIP 470PF	10.00% 50V
< TRANSFORMER >				C2022	1-162-966-11	CERAMIC CHIP 0.0022UF	10.00% 50V
T6002 $\Delta$	1-437-443-11	(PIT) CONVERTER TRANSFORMER		C2023	1-162-966-11	CERAMIC CHIP 0.0022UF	10.00% 50V
T6003 $\Delta$	1-424-896-11	TRANSFORMER, LINE FILTER		C2024	1-164-346-11	CERAMIC CHIP 1UF	16V
T6101 $\Delta$	1-437-483-11	TRANSFORMER, STANDBY		C2026	1-162-962-11	CERAMIC CHIP 470PF	10.00% 50V
< THERMISTOR >				C2027	1-126-947-11	ELECT 47UF	20.00% 35V
TH6002 $\Delta$	1-804-650-11	THERMISTOR, POSITIVE		C2028	1-126-947-11	ELECT 47UF	20.00% 35V
<b>*A-1300-358-A A Board, Complete (KV-28FX66B)</b> <b>*A-1300-167-A A Board, Complete (KV-28FX66E)</b> <b>*A-1300-601-A A Board, Complete (KV-28FX66U)</b> <b>*A-1300-579-A A Board, Complete (KV-32FX66B)</b> <b>*A-1300-172-A A Board, Complete (KV-32FX66E/</b> <b>KV-32FX66K)</b> <b>*A-1300-580-A A Board, Complete (KV-32FX66U)</b>				C2029	1-164-346-11	CERAMIC CHIP 1UF	16V
4-382-854-01 SCREW (M3X8), P, SW (+)				C2031	1-162-962-11	CERAMIC CHIP 470PF	10.00% 50V
<b>A Board Common Parts</b>				C2034	1-164-346-11	CERAMIC CHIP 1UF	16V
< CAPACITOR >				C2035	1-164-346-11	CERAMIC CHIP 1UF	16V
C1001	1-126-933-11	ELECT	100UF 20.00% 16V	C2038	1-162-970-11	CERAMIC CHIP 0.01UF	10.00% 25V
C1002	1-126-964-11	ELECT	10UF 20.00% 50V	C2039	1-162-906-11	CERAMIC CHIP 1.5PF	0.25PF 50V
C1004	1-163-021-91	CERAMIC CHIP	0.01UF 10.00% 50V	C2040	1-162-964-11	CERAMIC CHIP 0.001UF	10.00% 50V
C1006	1-126-933-11	ELECT	100UF 20.00% 16V	C2041	1-162-906-11	CERAMIC CHIP 1.5PF	0.25PF 50V
C1008	1-163-021-91	CERAMIC CHIP	0.01UF 10.00% 50V	C2042	1-216-864-11	SHORT CHIP	0
C1009	1-162-925-11	CERAMIC CHIP	68PF 5.00% 50V	C2043	1-162-962-11	CERAMIC CHIP 470PF	10.00% 50V
C1010	1-162-925-11	CERAMIC CHIP	68PF 5.00% 50V	C2044	1-163-021-91	CERAMIC CHIP 0.01UF	10.00% 50V
C1014	1-126-933-11	ELECT	100UF 20.00% 16V	C2046	1-162-923-11	CERAMIC CHIP 47PF	5.00% 50V
C1015	1-163-021-91	CERAMIC CHIP	0.01UF 10.00% 50V	C2047	1-162-927-11	CERAMIC CHIP 100PF	5.00% 50V
C1018	1-115-340-11	CERAMIC CHIP	0.22UF 10.00% 25V	C2048	1-126-947-11	ELECT 47UF	20.00% 35V
C1020	1-164-004-11	CERAMIC CHIP	0.1UF 10.00% 25V	C2049	1-162-925-11	CERAMIC CHIP 68PF	5.00% 50V
C1021	1-162-968-11	CERAMIC CHIP	0.0047UF 10.00% 50V	C2050	1-107-823-11	CERAMIC CHIP 0.47UF	10.00% 16V
C1022	1-216-295-91	SHORT CHIP	0	C2051	1-126-964-11	ELECT 10UF	20.00% 50V
C2000	1-162-968-11	CERAMIC CHIP	0.0047UF 10.00% 50V	C2052	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
				C2053	1-164-227-11	CERAMIC CHIP 0.022UF	10.00% 25V
				C2054	1-126-947-11	ELECT 47UF	20.00% 35V
				C2055	1-162-968-11	CERAMIC CHIP 0.0047UF	10.00% 50V
				C2057	1-126-964-11	ELECT 10UF	20.00% 50V
				C2058	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
				C2059	1-126-964-11	ELECT 10UF	20.00% 50V
				C2060	1-126-947-11	ELECT 47UF	20.00% 35V
				C2061	1-162-968-11	CERAMIC CHIP 0.0047UF	10.00% 50V
				C2062	1-164-346-11	CERAMIC CHIP 1UF	16V
				C2063	1-164-346-11	CERAMIC CHIP 1UF	16V
				C2064	1-126-964-11	ELECT 10UF	20.00% 50V

REF.NO.	PART.NO	DESCRIPTION	REMARK	REF.NO.	PART.NO	DESCRIPTION	REMARK
C2065	1-162-966-11	CERAMIC CHIP 0.0022UF	10.00% 50V	C3209	1-163-235-11	CERAMIC CHIP 22PF	5.00% 50V
C2066	1-162-966-11	CERAMIC CHIP 0.0022UF	10.00% 50V	C3210	1-126-964-11	ELECT 10UF	20.00% 50V
C2069	1-127-715-91	CERAMIC CHIP 0.22UF	10% 16V	C3211	1-126-964-11	ELECT 10UF	20.00% 50V
C2073	1-126-960-11	ELECT 1UF	20.00% 50V	C3213	1-164-222-91	CERAMIC CHIP 0.22UF	25V
C2074	1-126-960-11	ELECT 1UF	20.00% 50V	C3214	1-164-222-91	CERAMIC CHIP 0.22UF	25V
C2075	1-126-960-11	ELECT 1UF	20.00% 50V	C3215	1-164-222-91	CERAMIC CHIP 0.22UF	25V
C2077	1-126-960-11	ELECT 1UF	20.00% 50V	C3216	1-164-222-91	CERAMIC CHIP 0.22UF	25V
C2078	1-126-963-11	ELECT 4.7UF	20.00% 50V	C3217	1-164-222-91	CERAMIC CHIP 0.22UF	25V
C2079	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V	C3218	1-164-222-91	CERAMIC CHIP 0.22UF	25V
C2080	1-162-927-11	CERAMIC CHIP 100PF	5.00% 50V	C3219	1-164-222-91	CERAMIC CHIP 0.22UF	25V
C2081	1-162-928-11	CERAMIC CHIP 120PF	5.00% 50V	C3220	1-164-222-91	CERAMIC CHIP 0.22UF	25V
C2082	1-216-864-11	SHORT CHIP 0		C3221	1-164-222-91	CERAMIC CHIP 0.22UF	25V
C2083	1-162-964-11	CERAMIC CHIP 0.001UF	10.00% 50V	C3222	1-164-222-91	CERAMIC CHIP 0.22UF	25V
C2084	1-162-962-11	CERAMIC CHIP 470PF	10.00% 50V	C3223	1-164-222-91	CERAMIC CHIP 0.22UF	25V
C2085	1-163-021-91	CERAMIC CHIP 0.01UF	10.00% 50V	C3224	1-164-222-91	CERAMIC CHIP 0.22UF	25V
C2086	1-162-964-11	CERAMIC CHIP 0.001UF	10.00% 50V	C3225	1-164-222-91	CERAMIC CHIP 0.22UF	25V
C2087	1-163-021-91	CERAMIC CHIP 0.01UF	10.00% 50V	C3226	1-164-222-91	CERAMIC CHIP 0.22UF	25V
C2088	1-162-964-11	CERAMIC CHIP 0.001UF	10.00% 50V	C3227	1-164-222-91	CERAMIC CHIP 0.22UF	25V
C2089	1-162-962-11	CERAMIC CHIP 470PF	10.00% 50V	C3228	1-164-489-11	CERAMIC CHIP 0.22UF	10.00% 16V
C2090	1-126-947-11	ELECT 47UF	20.00% 35V	C3229	1-164-489-11	CERAMIC CHIP 0.22UF	10.00% 16V
C2091	1-126-947-11	ELECT 47UF	20.00% 35V	C3230	1-164-489-11	CERAMIC CHIP 0.22UF	10.00% 16V
C2092	1-126-947-11	ELECT 47UF	20.00% 35V	C3231	1-164-489-11	CERAMIC CHIP 0.22UF	10.00% 16V
C2093	1-126-947-11	ELECT 47UF	20.00% 35V	C3232	1-164-489-11	CERAMIC CHIP 0.22UF	10.00% 16V
C2094	1-126-947-11	ELECT 47UF	20.00% 35V	C3233	1-164-489-11	CERAMIC CHIP 0.22UF	10.00% 16V
C2095	1-126-947-11	ELECT 47UF	20.00% 35V	C3234	1-164-489-11	CERAMIC CHIP 0.22UF	10.00% 16V
C2096	1-162-970-11	CERAMIC CHIP 0.01UF	10.00% 25V	C3235	1-165-176-11	CERAMIC CHIP 0.047UF	10.00% 16V
C2500	1-126-952-11	ELECT 1000UF	20.00% 35V	C3236	1-165-176-11	CERAMIC CHIP 0.047UF	10.00% 16V
C2502	1-104-666-11	ELECT 220UF	20.00% 25V	C3237	1-165-176-11	CERAMIC CHIP 0.047UF	10.00% 16V
C2504	1-164-222-91	CERAMIC CHIP 0.22UF	25V	C3238	1-165-176-11	CERAMIC CHIP 0.047UF	10.00% 16V
C2505	1-115-339-11	CERAMIC CHIP 0.1UF	10.00% 50V	C3239	1-165-176-11	CERAMIC CHIP 0.047UF	10.00% 16V
C2506	1-126-972-11	ELECT 1000UF	20.00% 50V	C3240	1-165-176-11	CERAMIC CHIP 0.047UF	10.00% 16V
C2507	1-164-230-11	CERAMIC CHIP 220PF	5.00% 50V	C3241	1-126-933-11	ELECT 100UF	20.00% 16V
C2508	1-164-230-11	CERAMIC CHIP 220PF	5.00% 50V	C3242	1-162-970-11	CERAMIC CHIP 0.01UF	10.00% 25V
C2509	1-164-230-11	CERAMIC CHIP 220PF	5.00% 50V	C3243	1-164-222-91	CERAMIC CHIP 0.22UF	25V
C2510	1-164-227-11	CERAMIC CHIP 0.022UF	10.00% 25V	C3245	1-163-251-11	CERAMIC CHIP 100PF	5.00% 50V
C2511	1-163-021-91	CERAMIC CHIP 0.01UF	10.00% 50V	C3250	1-163-021-91	CERAMIC CHIP 0.01UF	10.00% 50V
C2512	1-163-021-91	CERAMIC CHIP 0.01UF	10.00% 50V	C3300	1-163-251-11	CERAMIC CHIP 100PF	5.00% 50V
C2513	1-126-952-11	ELECT 1000UF	20.00% 35V	C3309	1-126-964-11	ELECT 10UF	20.00% 50V
C2515	1-164-227-11	CERAMIC CHIP 0.022UF	10.00% 25V	C3310	1-164-222-91	CERAMIC CHIP 0.22UF	25V
C2516	1-126-953-11	ELECT 2200UF	20.00% 35V	C5103	1-126-960-11	ELECT 1UF	20.00% 50V
C2517	1-126-960-11	ELECT 1UF	20.00% 50V	C5106	1-126-933-11	ELECT 100UF	20.00% 16V
C2518	1-126-960-11	ELECT 1UF	20.00% 50V	C5109	1-126-964-11	ELECT 10UF	20.00% 50V
C2519	1-126-959-11	ELECT 0.47UF	20.00% 50V	C5110	1-126-947-11	ELECT 47UF	20.00% 35V
C2521	1-164-489-11	CERAMIC CHIP 0.22UF	10.00% 16V	C5111	1-126-964-11	ELECT 10UF	20.00% 50V
C2523	1-115-339-11	CERAMIC CHIP 0.1UF	10.00% 50V	C5112	1-126-964-11	ELECT 10UF	20.00% 50V
C3200	1-126-964-11	ELECT 10UF	20.00% 50V	C5114	1-164-156-11	CERAMIC CHIP 0.1UF	25V
C3202	1-104-666-11	ELECT 220UF	20.00% 25V	C5115	1-126-964-11	ELECT 10UF	20.00% 50V
C3203	1-126-964-11	ELECT 10UF	20.00% 50V	C5117	1-126-964-11	ELECT 10UF	20.00% 50V
C3206	1-126-964-11	ELECT 10UF	20.00% 50V	C5118	1-164-156-11	CERAMIC CHIP 0.1UF	25V
C3208	1-163-235-11	CERAMIC CHIP 22PF	5.00% 50V	C5119	1-107-823-11	CERAMIC CHIP 0.47UF	10.00% 16V

REF.NO.	PART.NO	DESCRIPTION	REMARK	REF.NO.	PART.NO	DESCRIPTION	REMARK
C5120	1-165-176-11	CERAMIC CHIP 0.047UF	10.00% 16V	C5889	1-126-964-11	ELECT 10UF	20.00% 50V
C5121	1-165-176-11	CERAMIC CHIP 0.047UF	10.00% 16V	C5890	1-164-227-11	CERAMIC CHIP 0.022UF	10.00% 25V
C5122	1-164-156-11	CERAMIC CHIP 0.1UF	25V	C5891	1-137-581-11	FILM 0.1UF	5.00% 100V
C5123	1-126-964-11	ELECT 10UF	20.00% 50V	C5892	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C5124	1-164-156-11	CERAMIC CHIP 0.1UF	25V	C5893	1-126-947-11	ELECT 47UF	20.00% 35V
C5125	1-126-964-11	ELECT 10UF	20.00% 50V	C5894	1-126-947-11	ELECT 47UF	20.00% 35V
C5300	1-126-933-11	ELECT 100UF	20.00% 16V	C5895	1-164-156-11	CERAMIC CHIP 0.1UF	25V
C5301	1-126-947-11	ELECT 47UF	20.00% 35V	C5896	1-165-176-11	CERAMIC CHIP 0.047UF	10.00% 16V
C5302	1-164-222-91	CERAMIC CHIP 0.22UF	25V	C5897	1-162-970-11	CERAMIC CHIP 0.01UF	10.00% 25V
C5303	1-136-153-00	FILM 0.01UF	5.00% 50V	C5898	1-162-964-11	CERAMIC CHIP 0.001UF	10.00% 50V
C5304	1-164-182-11	CERAMIC CHIP 0.0033UF	10.00% 50V	C5899	1-107-823-11	CERAMIC CHIP 0.47UF	10.00% 16V
C5305	1-165-176-11	CERAMIC CHIP 0.047UF	10.00% 16V	C6200	1-126-933-11	ELECT 100UF	20.00% 16V
C5306	1-164-156-11	CERAMIC CHIP 0.1UF	25V	C6201	1-126-935-11	ELECT 470UF	20.00% 16V
C5307	1-164-156-11	CERAMIC CHIP 0.1UF	25V	C6202	1-126-933-11	ELECT 100UF	20.00% 16V
C5309	1-162-927-11	CERAMIC CHIP 100PF	5.00% 50V	C6203	1-126-935-11	ELECT 470UF	20.00% 16V
C5310	1-136-165-00	FILM 0.1UF	5.00% 50V	C6204	1-126-933-11	ELECT 100UF	20.00% 16V
C5311	1-164-156-11	CERAMIC CHIP 0.1UF	25V	C6205	1-126-935-11	ELECT 470UF	20.00% 16V
C5312	1-165-176-11	CERAMIC CHIP 0.047UF	10.00% 16V	C6206	1-126-933-11	ELECT 100UF	20.00% 16V
C5313	1-107-714-11	ELECT 10UF	20.00% 50V	C6207	1-126-933-11	ELECT 100UF	20.00% 16V
C5314	1-162-970-11	CERAMIC CHIP 0.01UF	10.00% 25V	C6208	1-126-933-11	ELECT 100UF	20.00% 16V
C5316	1-164-230-11	CERAMIC CHIP 220PF	5.00% 50V	C6209	1-126-933-11	ELECT 100UF	20.00% 16V
C5318	1-164-156-11	CERAMIC CHIP 0.1UF	25V	C6210	1-126-935-11	ELECT 470UF	20.00% 16V
C5319	1-136-347-11	FILM 0.0047UF	5.00% 630V	C6211	1-126-947-11	ELECT 47UF	20.00% 35V
C5320	1-129-716-00	FILM 0.015UF	5.00% 630V	C6212	1-126-933-11	ELECT 100UF	20.00% 16V
C5321	1-136-347-11	FILM 0.0047UF	5.00% 630V	C6213	1-126-933-11	ELECT 100UF	20.00% 16V
C5322	1-164-156-11	CERAMIC CHIP 0.1UF	25V	C6214	1-126-933-11	ELECT 100UF	20.00% 16V
C5323	1-136-159-00	FILM 0.033UF	5.00% 50V	C7002	1-126-947-11	ELECT 47UF	20.00% 35V
C5400	1-126-964-11	ELECT 10UF	20.00% 50V	C7004	1-164-222-91	CERAMIC CHIP 0.22UF	25V
C5401	1-107-714-11	ELECT 10UF	20.00% 50V	C7008	1-162-919-11	CERAMIC CHIP 22PF	5.00% 50V
C5403	1-128-527-11	ELECT 330UF	20.00% 25V	C7016	1-107-823-11	CERAMIC CHIP 0.47UF	10.00% 16V
C5404	1-102-228-00	CERAMIC 470PF	10.00% 500V	C7018	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C5405	1-163-021-91	CERAMIC CHIP 0.01UF	10.00% 50V	C7019	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C5406	1-129-702-00	MYLAR 0.001UF	10.00% 400V	C7020	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C5407	1-128-527-11	ELECT 330UF	20.00% 25V	C7021	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C5409	1-126-968-11	ELECT 100UF	20.00% 50V	C7022	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C5410	1-163-021-91	CERAMIC CHIP 0.01UF	10.00% 50V	C7023	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C5411	1-137-401-11	MYLAR 0.22UF	5.00% 100V	C7030	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C5412	1-106-220-00	MYLAR 0.1UF	10.00% 100V	C7031	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C5413	1-130-785-11	MYLAR 0.47UF	5.00% 100V	C7032	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C5414	1-126-964-11	ELECT 10UF	20.00% 50V	C7038	1-107-823-11	CERAMIC CHIP 0.47UF	10.00% 16V
C5801	1-126-963-11	ELECT 4.7UF	20.00% 50V	C7039	1-162-966-11	CERAMIC CHIP 0.0022UF	10.00% 50V
C5850	1-126-963-11	ELECT 4.7UF	20.00% 50V	C7050	1-162-927-11	CERAMIC CHIP 100PF	5.00% 50V
C5851	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V	C7051	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C5854	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V	C7052	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C5858	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V	C7053	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C5859	1-126-960-11	ELECT 1UF	20.00% 50V	C7054	1-126-963-11	ELECT 4.7UF	20.00% 50V
C5860	1-165-176-11	CERAMIC CHIP 0.047UF	10.00% 16V	C7055	1-164-222-91	CERAMIC CHIP 0.22UF	25V
C5868	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V	C7056	1-126-933-11	ELECT 100UF	20.00% 16V
C5873	1-163-251-11	CERAMIC CHIP 100PF	5.00% 50V	C7057	1-164-222-91	CERAMIC CHIP 0.22UF	25V
C5888	1-164-156-11	CERAMIC CHIP 0.1UF	25V	C7058	1-126-933-11	ELECT 100UF	20.00% 16V

REF.NO.	PART.NO	DESCRIPTION	REMARK	REF.NO.	PART.NO	DESCRIPTION	REMARK
C7059	1-126-933-11	ELECT 100UF	20.00% 16V	D3001	8-719-929-15	DIODE HZS9.1NB2	
C7060	1-164-222-91	CERAMIC CHIP 0.22UF	25V	D3003	8-719-929-15	DIODE HZS9.1NB2	
C7061	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V	D3005	8-719-929-15	DIODE HZS9.1NB2	
C7062	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V	D3007	8-719-109-89	DIODE RD5.6ESB2	
C7063	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V	D3008	8-719-109-89	DIODE RD5.6ESB2	
C7064	1-126-947-11	ELECT 47UF	20.00% 35V	D3009	8-719-929-15	DIODE HZS9.1NB2	
C7065	1-164-222-91	CERAMIC CHIP 0.22UF	25V	D3011	8-719-929-15	DIODE HZS9.1NB2	
C7067	1-126-947-11	ELECT 47UF	20.00% 35V	D3013	8-719-929-15	DIODE HZS9.1NB2	
C7068	1-164-222-91	CERAMIC CHIP 0.22UF	25V	D3015	8-719-929-15	DIODE HZS9.1NB2	
C7069	1-162-919-11	CERAMIC CHIP 22PF	5.00% 50V	D3017	8-719-109-89	DIODE RD5.6ESB2	
C7070	1-162-919-11	CERAMIC CHIP 22PF	5.00% 50V	D3018	8-719-109-89	DIODE RD5.6ESB2	
C7071	1-162-919-11	CERAMIC CHIP 22PF	5.00% 50V	D3019	8-719-929-15	DIODE HZS9.1NB2	
< CONNECTOR >				D3021	8-719-929-15	DIODE HZS9.1NB2	
CN0101	1-823-330-11	CONNECTOR, BOARD TO BOARD 40P		D3023	8-719-109-89	DIODE RD5.6ESB2	
CN0102	*1-564-520-11	PLUG, CONNECTOR 5P		D3024	8-719-929-15	DIODE HZS9.1NB2	
CN0103	*1-564-507-11	PLUG, CONNECTOR 4P		D3026	8-719-929-15	DIODE HZS9.1NB2	
CN1000	1-770-130-11	CONNECTOR (SQUARE TYPE) 21P		D3028	8-719-929-15	DIODE HZS9.1NB2	
CN1001	1-766-296-21	CONNECTOR, DUAL SCART		D3201	8-719-109-89	DIODE RD5.6ESB2	
CN2000	*1-564-512-11	PLUG, CONNECTOR 9P		D5101	8-719-050-38	DIODE M1MA152WK-T1	
CN2500	*1-564-506-11	PLUG, CONNECTOR 3P		D5103	8-719-110-86	DIODE RD39ESB	
CN2501	*1-564-507-11	PLUG, CONNECTOR 4P		D5104	8-719-109-89	DIODE RD5.6ESB2	
CN2502	*1-564-509-11	PLUG, CONNECTOR 6P		D5300	8-719-081-97	DIODE MMDL914T1	
CN5002	*1-564-510-11	PLUG, CONNECTOR 7P		D5303	8-719-081-97	DIODE MMDL914T1	
CN5100	*1-564-506-11	PLUG, CONNECTOR 3P		D5304	8-719-081-97	DIODE MMDL914T1	
CN5801	1-764-333-11	PLUG, CONNECTOR 10P		D5305	8-719-991-33	DIODE 1SS133T-77	
CN5802	1-691-772-11	PLUG (MICRO CONNECTOR) 10P		D5306	8-719-302-43	DIODE EL1Z	
CN6200	*1-564-507-11	PLUG, CONNECTOR 4P		D5307	8-719-987-87	DIODE ERA85-009	
CN6202	*1-564-516-11	PLUG, CONNECTOR 13P		D5309	8-719-081-97	DIODE MMDL914T1	
CN6203	1-695-915-11	TAB (CONTACT)		D5310	8-719-081-97	DIODE MMDL914T1	
CN7000	*1-564-508-11	PLUG, CONNECTOR 5P		D5400	8-719-982-03	DIODE MTZJ-3.6A	
CN7001	*1-564-512-11	PLUG, CONNECTOR 9P		D5401	8-719-050-38	DIODE M1MA152WK-T1	
CN8001	1-766-281-11	PIN, CONNECTOR (PC BOARD) 8P		D5404	8-719-110-41	DIODE RD15ESB2	
< DIODE >				D5405	8-719-908-03	DIODE GP08D	
D0101	8-719-921-88	DIODE MTZJ-13B		D5406	8-719-081-97	DIODE MMDL914T1	
D0104	8-719-109-89	DIODE RD5.6ESB2		D5407	8-719-081-97	DIODE MMDL914T1	
D0110	8-719-109-89	DIODE RD5.6ESB2		D5804	8-719-109-89	DIODE RD5.6ESB2	
D0111	8-719-929-15	DIODE HZS9.1NB2		D5807	8-719-929-15	DIODE HZS9.1NB2	
D0112	8-719-921-88	DIODE MTZJ-13B		D5809	8-719-050-38	DIODE M1MA152WK-T1	
D0113	8-719-921-88	DIODE MTZJ-13B		D5811	8-719-081-97	DIODE MMDL914T1	
D1006	8-719-109-89	DIODE RD5.6ESB2		D5812	8-719-081-97	DIODE MMDL914T1	
D2014	8-719-929-15	DIODE HZS9.1NB2		D5813	8-719-081-97	DIODE MMDL914T1	
D2015	8-719-929-15	DIODE HZS9.1NB2		D5814	1-216-295-91	SHORT CHIP 0	
D2016	8-719-050-38	DIODE M1MA152WK-T1		D6200	8-719-063-70	DIODE D1NL20U	
D2018	8-719-929-15	DIODE HZS9.1NB2		D7004	8-719-929-15	DIODE HZS9.1NB2	
D2019	8-719-929-15	DIODE HZS9.1NB2		D7006	1-216-809-11	RES-CHIP 100 5% 1/10W	
D2500	8-719-050-38	DIODE M1MA152WK-T1		< FERRITE BEAD >			
D2502	8-719-109-89	DIODE RD5.6ESB2		FB3001	1-414-760-21	FERRITE 0UH	
D2503	8-719-050-38	DIODE M1MA152WK-T1					

**Note :** The components identified by shading and marked  $\Delta$  are critical for safety. Replace only with the part numbers specified in the parts list.

**A**

REF.NO.	PART.NO	DESCRIPTION	REMARK	REF.NO.	PART.NO	DESCRIPTION	REMARK
< FILTER >				L3008	1-216-295-91	SHORT CHIP	0
FL2000	1-239-803-11	FILTER, EMI		L3009	1-216-295-91	SHORT CHIP	0
< IC >				L3010	1-216-295-91	SHORT CHIP	0
IC2000	6-701-031-01	IC MSP3411G-QA-B10		L3011	1-216-295-91	SHORT CHIP	0
IC2001	8-759-100-96	IC UPC4558G2		L3012	1-216-295-91	SHORT CHIP	0
IC2500	8-759-831-56	IC TDA7497		L3200	1-412-006-31	INDUCTOR	10UH
IC3200	6-702-458-01	IC VSP9407B-B11-GEG		L3202	1-412-006-31	INDUCTOR	10UH
IC5102	8-759-325-48	IC CA0005AD		L3203	1-412-006-31	INDUCTOR	10UH
IC5103	8-752-072-94	IC CXA1875AM-T4		L3206	1-412-006-31	INDUCTOR	10UH
IC5104	8-759-803-42	IC LA6500-FA		L3208	1-412-006-31	INDUCTOR	10UH
IC5300	8-759-008-70	IC LM358N		L3300	1-412-006-31	INDUCTOR	10UH
IC5301	8-759-659-67	IC LA6393DLL		L5300	1-406-989-21	INDUCTOR	10MH
IC5302	8-759-659-67	IC LA6393DLL		L5301	1-406-989-21	INDUCTOR	10MH
IC5400	8-759-696-71	IC STV9379A		L5400	1-412-524-11	INDUCTOR	8.2UH
IC6200	8-759-648-19	IC L7809CV/LSY		L5896	1-216-864-11	SHORT CHIP	0
IC6201	8-759-648-20	IC L7805CV/LSY		L5897	1-216-864-11	SHORT CHIP	0
IC6202	8-759-445-59	IC BA033T		L5898	1-414-934-21	INDUCTOR	10UH
IC6203	8-759-098-24	IC PQ30RV11		L5899	1-414-934-21	INDUCTOR	10UH
IC6204	8-759-591-02	IC L78L33ABZ-AP		L7001	1-414-934-21	INDUCTOR	10UH
IC6205	8-759-394-35	IC BA12T		L7009	1-414-934-21	INDUCTOR	10UH
IC6206	8-759-991-41	IC LM78L05ACZ		L7010	1-414-934-21	INDUCTOR	10UH
IC7002	8-752-090-88	IC CXA2100AQ-TL		L7011	1-414-934-21	INDUCTOR	10UH
< SOCKET >				L7012	1-414-934-21	INDUCTOR	10UH
J2000	1-784-632-11	JACK, PIN 2P		< PROTECTOR MODULE >			
< COIL >				PS2501 $\Delta$	1-533-597-31	LINK, IC	5A
L1000	1-412-987-31	INDUCTOR	4.7UH	< TRANSISTOR >			
L1001	1-412-987-31	INDUCTOR	4.7UH	Q1000	8-729-010-05	TRANSISTOR MSB709-RT1	
L1002	1-414-934-21	INDUCTOR	10UH	Q1001	8-729-010-29	TRANSISTOR MSD601-RST1	
L1003	1-414-934-21	INDUCTOR	10UH	Q1004	8-729-010-05	TRANSISTOR MSB709-RT1	
L1005	1-414-934-21	INDUCTOR	10UH	Q1005	8-729-421-19	TRANSISTOR UN2213	
L2000	1-414-934-21	INDUCTOR	10UH	Q1006	8-729-010-05	TRANSISTOR MSB709-RT1	
L2001	1-414-934-21	INDUCTOR	10UH	Q2000	8-729-010-29	TRANSISTOR MSD601-RST1	
L2007	1-535-143-61	LEAD, JUMPER	(5.0MM)	Q2001	8-729-010-29	TRANSISTOR MSD601-RST1	
L2008	1-216-295-91	SHORT CHIP	0	Q2002	8-729-010-29	TRANSISTOR MSD601-RST1	
L2009	1-216-295-91	SHORT CHIP	0	Q2003	8-729-010-29	TRANSISTOR MSD601-RST1	
L2010	1-414-928-21	INDUCTOR	1UH	Q2004	8-729-010-29	TRANSISTOR MSD601-RST1	
L2012	1-414-934-21	INDUCTOR	10UH	Q2005	8-729-010-29	TRANSISTOR MSD601-RST1	
L2014	1-408-602-31	INDUCTOR	8.2UH	Q2501	8-729-010-29	TRANSISTOR MSD601-RST1	
L2500	1-535-143-61	LEAD, JUMPER	(5.0MM)	Q2502	8-729-010-29	TRANSISTOR MSD601-RST1	
L2501	1-535-143-61	LEAD, JUMPER	(5.0MM)	Q2503	8-729-010-29	TRANSISTOR MSD601-RST1	
L3000	1-216-295-91	SHORT CHIP	0	Q2504	8-729-010-05	TRANSISTOR MSB709-RT1	
L3004	1-216-295-91	SHORT CHIP	0	Q3200	8-729-010-29	TRANSISTOR MSD601-RST1	
L3005	1-216-295-91	SHORT CHIP	0	Q3201	8-729-010-29	TRANSISTOR MSD601-RST1	
L3006	1-216-295-91	SHORT CHIP	0	Q3202	8-729-010-05	TRANSISTOR MSB709-RT1	
L3007	1-216-295-91	SHORT CHIP	0	Q3204	8-729-010-05	TRANSISTOR MSB709-RT1	
				Q3300	8-729-010-05	TRANSISTOR MSB709-RT1	
				Q3301	8-729-010-05	TRANSISTOR MSB709-RT1	



REF.NO.	PART.NO	DESCRIPTION	REMARK	REF.NO.	PART.NO	DESCRIPTION	REMARK
Q3302	8-729-010-05	TRANSISTOR MSB709-RT1		R1004	1-216-809-11	RES-CHIP 100 5%	1/10W
Q3500	8-729-028-28	TRANSISTOR 2SK2036(TE85L)		R1005	1-216-049-11	RES-CHIP 1K 5%	1/10W
Q3501	8-729-028-28	TRANSISTOR 2SK2036(TE85L)		R1006	1-216-051-00	RES-CHIP 1.2K 5%	1/10W
Q5100	8-729-010-05	TRANSISTOR MSB709-RT1		R1007	1-412-987-31	INDUCTOR 4.7UH	
Q5101	8-729-010-29	TRANSISTOR MSD601-RST1		R1008	1-216-295-91	SHORT CHIP 0	
Q5300	8-729-010-29	TRANSISTOR MSD601-RST1		R1009	1-216-295-91	SHORT CHIP 0	
Q5301	8-729-053-33	TRANSISTOR IRF614-037		R1010	1-216-295-91	SHORT CHIP 0	
Q5302	8-729-140-97	TRANSISTOR 2SB734-34		R1017	1-216-822-11	RES-CHIP 1.2K 5%	1/10W
Q5303	8-729-010-29	TRANSISTOR MSD601-RST1		R1019	1-216-295-91	SHORT CHIP 0	
Q5304	8-729-010-29	TRANSISTOR MSD601-RST1		R1021	1-216-833-11	RES-CHIP 10K 5%	1/10W
Q5305	8-729-119-78	TRANSISTOR 2SC2785-HFE		R1022	1-216-839-11	RES-CHIP 33K 5%	1/10W
Q5306	8-729-140-97	TRANSISTOR 2SB734-34		R1023	1-216-849-11	RES-CHIP 220K 5%	1/10W
Q5307	8-729-010-05	TRANSISTOR MSB709-RT1		R1024	1-216-839-11	RES-CHIP 33K 5%	1/10W
Q5400	8-729-010-29	TRANSISTOR MSD601-RST1		R1025	1-216-837-11	RES-CHIP 22K 5%	1/10W
Q5401	8-729-421-19	TRANSISTOR UN2213		R1026	1-216-817-11	RES-CHIP 470 5%	1/10W
Q5402	8-729-010-05	TRANSISTOR MSB709-RT1		R2009	1-216-817-11	RES-CHIP 470 5%	1/10W
Q5403	8-729-421-19	TRANSISTOR UN2213		R2010	1-216-817-11	RES-CHIP 470 5%	1/10W
Q5404	8-729-926-76	TRANSISTOR IRF620		R2011	1-216-049-11	RES-CHIP 1K 5%	1/10W
Q5813	8-729-421-19	TRANSISTOR UN2213		R2014	1-216-049-11	RES-CHIP 1K 5%	1/10W
Q5814	8-729-010-05	TRANSISTOR MSB709-RT1		R2015	1-216-295-91	SHORT CHIP 0	
Q5815	8-729-010-29	TRANSISTOR MSD601-RST1		R2017	1-216-853-11	RES-CHIP 470K 5%	1/10W
Q5816	8-729-010-05	TRANSISTOR MSB709-RT1		R2018	1-216-295-91	SHORT CHIP 0	
Q6201	8-729-140-97	TRANSISTOR 2SB734-34		R2020	1-216-853-11	RES-CHIP 470K 5%	1/10W
Q7003	8-729-010-29	TRANSISTOR MSD601-RST1		R2023	1-216-853-11	RES-CHIP 470K 5%	1/10W
Q7009	8-729-010-05	TRANSISTOR MSB709-RT1		R2026	1-216-853-11	RES-CHIP 470K 5%	1/10W
Q7011	8-729-010-05	TRANSISTOR MSB709-RT1		R2029	1-216-853-11	RES-CHIP 470K 5%	1/10W
Q7012	8-729-010-05	TRANSISTOR MSB709-RT1		R2032	1-216-853-11	RES-CHIP 470K 5%	1/10W
Q7013	8-729-010-29	TRANSISTOR MSD601-RST1		R2035	1-216-853-11	RES-CHIP 470K 5%	1/10W
Q7014	8-729-010-05	TRANSISTOR MSB709-RT1		R2038	1-216-853-11	RES-CHIP 470K 5%	1/10W
Q7015	8-729-010-05	TRANSISTOR MSB709-RT1		R2041	1-216-853-11	RES-CHIP 470K 5%	1/10W
Q7016	8-729-010-29	TRANSISTOR MSD601-RST1		R2042	1-216-829-11	RES-CHIP 4.7K 5%	1/10W
Q7017	8-729-010-05	TRANSISTOR MSB709-RT1		R2043	1-216-829-11	RES-CHIP 4.7K 5%	1/10W
Q7018	8-729-010-05	TRANSISTOR MSB709-RT1		R2044	1-216-853-11	RES-CHIP 470K 5%	1/10W
Q7019	8-729-010-29	TRANSISTOR MSD601-RST1		R2047	1-216-853-11	RES-CHIP 470K 5%	1/10W
				R2048	1-216-837-11	RES-CHIP 22K 5%	1/10W
< RESISTOR >				R2050	1-216-845-11	RES-CHIP 100K 5%	1/10W
JR121	1-216-864-11	SHORT CHIP 0		R2051	1-216-049-11	RES-CHIP 1K 5%	1/10W
JR123	1-216-864-11	SHORT CHIP 0		R2052	1-216-837-11	RES-CHIP 22K 5%	1/10W
JR2000	1-216-295-91	SHORT CHIP 0		R2053	1-216-864-11	SHORT CHIP 0	
				R2054	1-216-049-11	RES-CHIP 1K 5%	1/10W
R0101	1-216-833-11	RES-CHIP 10K 5%	1/10W	R2055	1-216-049-11	RES-CHIP 1K 5%	1/10W
R0102	1-216-827-11	RES-CHIP 3.3K 5%	1/10W	R2056	1-216-037-00	RES-CHIP 330 5%	1/10W
R0103	1-216-073-91	RES-CHIP 10K 5%	1/10W	R2057	1-216-025-11	RES-CHIP 100 5%	1/10W
R0104	1-216-827-11	RES-CHIP 3.3K 5%	1/10W	R2058	1-216-025-11	RES-CHIP 100 5%	1/10W
R0105	1-216-025-11	RES-CHIP 100 5%	1/10W	R2059	1-216-829-11	RES-CHIP 4.7K 5%	1/10W
R0107	1-216-025-11	RES-CHIP 100 5%	1/10W	R2060	1-216-829-11	RES-CHIP 4.7K 5%	1/10W
R1000	1-216-049-11	RES-CHIP 1K 5%	1/10W	R2061	1-216-829-11	RES-CHIP 4.7K 5%	1/10W
R1001	1-216-001-00	RES-CHIP 10 5%	1/10W	R2062	1-216-829-11	RES-CHIP 4.7K 5%	1/10W
R1002	1-216-821-11	RES-CHIP 1K 5%	1/10W	R2063	1-216-829-11	RES-CHIP 4.7K 5%	1/10W
R1003	1-216-809-11	RES-CHIP 100 5%	1/10W	R2064	1-249-425-11	CARBON 4.7K 5%	1/4W



REF.NO.	PART.NO	DESCRIPTION	REMARK			REF.NO.	PART.NO	DESCRIPTION	REMARK		
R2065	1-216-837-11	RES-CHIP	22K	5%	1/10W	R2921	1-216-295-91	SHORT CHIP	0		
R2066	1-216-829-11	RES-CHIP	4.7K	5%	1/10W	R2924	1-216-295-91	SHORT CHIP	0		
R2067	1-216-829-11	RES-CHIP	4.7K	5%	1/10W	R2927	1-216-295-91	SHORT CHIP	0		
R2068	1-216-049-11	RES-CHIP	1K	5%	1/10W	R2930	1-216-295-91	SHORT CHIP	0		
R2069	1-216-837-11	RES-CHIP	22K	5%	1/10W	R2933	1-216-295-91	SHORT CHIP	0		
R2070	1-216-833-11	RES-CHIP	10K	5%	1/10W	R2936	1-216-295-91	SHORT CHIP	0		
R2071	1-216-839-11	RES-CHIP	33K	5%	1/10W	R2939	1-216-295-91	SHORT CHIP	0		
R2072	1-216-049-11	RES-CHIP	1K	5%	1/10W	R2942	1-216-295-91	SHORT CHIP	0		
R2073	1-216-049-11	RES-CHIP	1K	5%	1/10W	R2945	1-216-295-91	SHORT CHIP	0		
R2074	1-216-837-11	RES-CHIP	22K	5%	1/10W	R3000	1-216-025-11	RES-CHIP	100	5%	1/10W
R2075	1-216-833-11	RES-CHIP	10K	5%	1/10W	R3001	1-216-022-00	RES-CHIP	75	5%	1/10W
R2076	1-216-839-11	RES-CHIP	33K	5%	1/10W	R3009	1-216-025-11	RES-CHIP	100	5%	1/10W
R2077	1-216-049-11	RES-CHIP	1K	5%	1/10W	R3010	1-216-022-00	RES-CHIP	75	5%	1/10W
R2078	1-216-025-11	RES-CHIP	100	5%	1/10W	R3011	1-216-025-11	RES-CHIP	100	5%	1/10W
R2079	1-216-049-11	RES-CHIP	1K	5%	1/10W	R3012	1-216-022-00	RES-CHIP	75	5%	1/10W
R2080	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W	R3013	1-216-025-11	RES-CHIP	100	5%	1/10W
R2081	1-216-833-11	RES-CHIP	10K	5%	1/10W	R3014	1-216-022-00	RES-CHIP	75	5%	1/10W
R2082	1-216-805-11	RES-CHIP	47	5%	1/10W	R3015	1-216-022-00	RES-CHIP	75	5%	1/10W
R2083	1-216-817-11	RES-CHIP	470	5%	1/10W	R3016	1-216-025-11	RES-CHIP	100	5%	1/10W
R2084	1-216-837-11	RES-CHIP	22K	5%	1/10W	R3017	1-216-022-00	RES-CHIP	75	5%	1/10W
R2085	1-216-837-11	RES-CHIP	22K	5%	1/10W	R3018	1-216-025-11	RES-CHIP	100	5%	1/10W
R2086	1-216-837-11	RES-CHIP	22K	5%	1/10W	R3019	1-216-022-00	RES-CHIP	75	5%	1/10W
R2087	1-216-837-11	RES-CHIP	22K	5%	1/10W	R3020	1-216-025-11	RES-CHIP	100	5%	1/10W
R2088	1-216-041-00	RES-CHIP	470	5%	1/10W	R3021	1-216-022-00	RES-CHIP	75	5%	1/10W
R2089	1-216-041-00	RES-CHIP	470	5%	1/10W	R3022	1-216-025-11	RES-CHIP	100	5%	1/10W
R2092	1-216-039-00	RES-CHIP	390	5%	1/10W	R3023	1-216-022-00	RES-CHIP	75	5%	1/10W
R2093	1-216-039-00	RES-CHIP	390	5%	1/10W	R3024	1-216-025-11	RES-CHIP	100	5%	1/10W
R2094	1-216-039-00	RES-CHIP	390	5%	1/10W	R3025	1-216-022-00	RES-CHIP	75	5%	1/10W
R2095	1-216-039-00	RES-CHIP	390	5%	1/10W	R3026	1-216-022-00	RES-CHIP	75	5%	1/10W
R2096	1-216-039-00	RES-CHIP	390	5%	1/10W	R3027	1-216-025-11	RES-CHIP	100	5%	1/10W
R2097	1-216-039-00	RES-CHIP	390	5%	1/10W	R3028	1-216-022-00	RES-CHIP	75	5%	1/10W
R2098	1-216-049-11	RES-CHIP	1K	5%	1/10W	R3029	1-216-045-00	RES-CHIP	680	5%	1/10W
R2099	1-216-049-11	RES-CHIP	1K	5%	1/10W	R3030	1-216-022-00	RES-CHIP	75	5%	1/10W
R2500	1-216-073-91	RES-CHIP	10K	5%	1/10W	R3031	1-216-022-00	RES-CHIP	75	5%	1/10W
R2501	1-216-341-11	METAL OXIDE	0.22	5%	1W	R3032	1-216-022-00	RES-CHIP	75	5%	1/10W
R2502	1-208-810-11	METAL CHIP	15K	0.5%	1/10W	R3033	1-216-025-11	RES-CHIP	100	5%	1/10W
R2503	1-208-810-11	METAL CHIP	15K	0.5%	1/10W	R3034	1-216-022-00	RES-CHIP	75	5%	1/10W
R2504	1-216-049-11	RES-CHIP	1K	5%	1/10W	R3035	1-216-025-11	RES-CHIP	100	5%	1/10W
R2507	1-216-837-11	RES-CHIP	22K	5%	1/10W	R3036	1-216-022-00	RES-CHIP	75	5%	1/10W
R2509	1-249-417-11	CARBON	1K	5%	1/4W	R3037	1-216-045-00	RES-CHIP	680	5%	1/10W
R2511	1-216-073-91	RES-CHIP	10K	5%	1/10W	R3218	1-216-821-11	RES-CHIP	1K	5%	1/10W
R2516	1-216-081-00	RES-CHIP	22K	5%	1/10W	R3219	1-216-821-11	RES-CHIP	1K	5%	1/10W
R2517	1-216-841-11	RES-CHIP	47K	5%	1/10W	R3220	1-216-837-11	RES-CHIP	22K	5%	1/10W
R2518	1-216-049-11	RES-CHIP	1K	5%	1/10W	R3221	1-216-837-11	RES-CHIP	22K	5%	1/10W
R2519	1-216-833-11	RES-CHIP	10K	5%	1/10W	R3222	1-216-837-11	RES-CHIP	22K	5%	1/10W
R2520	1-216-025-11	RES-CHIP	100	5%	1/10W	R3223	1-216-837-11	RES-CHIP	22K	5%	1/10W
R2524	1-216-833-11	RES-CHIP	10K	5%	1/10W	R3225	1-216-025-11	RES-CHIP	100	5%	1/10W
R2525	1-216-828-11	RES-CHIP	3.9K	5%	1/10W	R3226	1-216-025-11	RES-CHIP	100	5%	1/10W
R2912	1-216-295-91	SHORT CHIP	0			R3229	1-216-025-11	RES-CHIP	100	5%	1/10W
R2914	1-216-853-11	RES-CHIP	470K	5%	1/10W	R3233	1-216-821-11	RES-CHIP	1K	5%	1/10W

REF.NO.	PART.NO	DESCRIPTION	REMARK			REF.NO.	PART.NO	DESCRIPTION	REMARK		
R3234	1-216-821-11	RES-CHIP	1K	5%	1/10W	R5157	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R3235	1-216-822-11	RES-CHIP	1.2K	5%	1/10W	R5300	1-208-806-11	METAL CHIP	10K	0.5%	1/10W
R3236	1-216-822-11	RES-CHIP	1.2K	5%	1/10W	R5301	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R3237	1-216-797-11	RES-CHIP	10	5%	1/10W	R5302	1-208-806-11	METAL CHIP	10K	0.5%	1/10W
R3238	1-216-797-11	RES-CHIP	10	5%	1/10W	R5303	1-208-824-11	METAL CHIP	56K	0.5%	1/10W
R3305	1-216-025-11	RES-CHIP	100	5%	1/10W	R5304	1-208-806-11	METAL CHIP	10K	0.5%	1/10W
R3306	1-216-025-11	RES-CHIP	100	5%	1/10W	R5305	1-208-852-11	METAL CHIP	820K	0.5%	1/10W
R3312	1-216-825-11	RES-CHIP	2.2K	5%	1/10W	R5306	1-208-802-11	METAL CHIP	6.8K	0.5%	1/10W
R3313	1-216-825-11	RES-CHIP	2.2K	5%	1/10W	R5307	1-216-041-00	RES-CHIP	470	5%	1/10W
R3314	1-216-825-11	RES-CHIP	2.2K	5%	1/10W	R5308	1-216-295-91	SHORT CHIP	0		
R3318	1-216-025-11	RES-CHIP	100	5%	1/10W	R5309	1-208-824-11	METAL CHIP	56K	0.5%	1/10W
R3319	1-216-025-11	RES-CHIP	100	5%	1/10W	R5310	1-208-830-11	METAL CHIP	100K	0.5%	1/10W
R3320	1-216-025-11	RES-CHIP	100	5%	1/10W	R5311	1-216-045-00	RES-CHIP	680	5%	1/10W
R3403	1-216-821-11	RES-CHIP	1K	5%	1/10W	R5312	1-208-832-11	METAL CHIP	120K	0.5%	1/10W
R3500	1-216-834-11	RES-CHIP	12K	5%	1/10W	R5314	1-208-840-11	METAL CHIP	270K	0.5%	1/10W
R3501	1-216-834-11	RES-CHIP	12K	5%	1/10W	R5315	1-216-043-91	RES-CHIP	560	5%	1/10W
R3504	1-216-825-11	RES-CHIP	2.2K	5%	1/10W	R5316	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R3505	1-216-825-11	RES-CHIP	2.2K	5%	1/10W	R5317	1-216-845-11	RES-CHIP	100K	5%	1/10W
R3603	1-216-295-91	SHORT CHIP	0			R5318	1-208-806-11	METAL CHIP	10K	0.5%	1/10W
R5102	1-208-814-91	METAL CHIP	22K	0.5%	1/10W	R5319	1-208-840-11	METAL CHIP	270K	0.5%	1/10W
R5103	1-216-637-11	METAL CHIP	270	0.5%	1/10W	R5320	1-216-833-11	RES-CHIP	10K	5%	1/10W
R5107	1-208-814-91	METAL CHIP	22K	0.5%	1/10W	R5321	1-216-837-11	RES-CHIP	22K	5%	1/10W
R5111	1-208-814-91	METAL CHIP	22K	0.5%	1/10W	R5322	1-216-820-11	RES-CHIP	820	5%	1/10W
R5112	1-216-679-11	METAL CHIP	15K	0.5%	1/10W	R5324	1-208-810-11	METAL CHIP	15K	0.5%	1/10W
R5118	1-249-411-11	CARBON	330	5%	1/4W	R5325	1-208-812-11	METAL CHIP	18K	0.5%	1/10W
R5119	1-216-844-11	RES-CHIP	82K	5%	1/10W	R5326	1-216-845-11	RES-CHIP	100K	5%	1/10W
R5122	1-216-821-11	RES-CHIP	1K	5%	1/10W	R5327	1-216-472-00	METAL OXIDE	39	5%	3W
R5125	1-216-836-11	RES-CHIP	18K	5%	1/10W	R5328	1-216-033-00	RES-CHIP	220	5%	1/10W
R5126	1-249-406-11	CARBON	120	5%	1/4W	R5331	1-216-033-00	RES-CHIP	220	5%	1/10W
R5127	1-216-025-11	RES-CHIP	100	5%	1/10W	R5332	1-208-806-11	METAL CHIP	10K	0.5%	1/10W
R5128	1-216-809-11	RES-CHIP	100	5%	1/10W	R5333	1-208-820-11	METAL CHIP	39K	0.5%	1/10W
R5129	1-216-809-11	RES-CHIP	100	5%	1/10W	R5334	1-208-834-11	METAL CHIP	150K	0.5%	1/10W
R5130	1-216-809-11	RES-CHIP	100	5%	1/10W	R5335	1-208-818-11	METAL CHIP	33K	0.5%	1/10W
R5131	1-216-821-11	RES-CHIP	1K	5%	1/10W	R5336	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R5132	1-216-809-11	RES-CHIP	100	5%	1/10W	R5337	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W
R5133	1-216-809-11	RES-CHIP	100	5%	1/10W	R5338	1-249-413-11	CARBON	470	5%	1/4W
R5137	1-216-809-11	RES-CHIP	100	5%	1/10W	R5340	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R5138	1-216-809-11	RES-CHIP	100	5%	1/10W	R5341	1-216-089-91	RES-CHIP	47K	5%	1/10W
R5139	1-216-821-11	RES-CHIP	1K	5%	1/10W	R5342	1-208-818-11	METAL CHIP	33K	0.5%	1/10W
R5140	1-216-821-11	RES-CHIP	1K	5%	1/10W	R5343	1-208-808-11	METAL CHIP	12K	0.5%	1/10W
R5146	1-216-025-11	RES-CHIP	100	5%	1/10W	R5344	1-208-820-11	METAL CHIP	39K	0.5%	1/10W
R5148	1-216-809-11	RES-CHIP	100	5%	1/10W	R5345	1-208-832-11	METAL CHIP	120K	0.5%	1/10W
R5149	1-216-637-11	METAL CHIP	270	0.5%	1/10W	R5346	1-216-849-11	RES-CHIP	220K	5%	1/10W
R5150	1-249-414-11	CARBON	560	5%	1/4W	R5347	1-216-833-11	RES-CHIP	10K	5%	1/10W
R5151	1-249-454-11	CARBON	3.9	5%	1/4W	R5349	1-216-043-91	RES-CHIP	560	5%	1/10W
R5152	1-249-413-11	CARBON	470	5%	1/4W	R5350	1-216-041-00	RES-CHIP	470	5%	1/10W
R5153	1-249-393-11	CARBON	10	5%	1/4W	R5351	1-216-809-11	RES-CHIP	100	5%	1/10W
R5154	1-216-833-11	RES-CHIP	10K	5%	1/10W	R5352	1-216-821-11	RES-CHIP	1K	5%	1/10W
R5155	1-249-421-11	CARBON	2.2K	5%	1/4W	R5400	1-216-848-11	RES-CHIP	180K	5%	1/10W
R5156	1-216-833-11	RES-CHIP	10K	5%	1/10W	R5401	1-216-837-11	RES-CHIP	22K	5%	1/10W

REF.NO.	PART.NO	DESCRIPTION	REMARK	REF.NO.	PART.NO	DESCRIPTION	REMARK
R5402	1-216-081-00	RES-CHIP	22K 5% 1/10W	R7035	1-216-025-11	RES-CHIP	100 5% 1/10W
R5403	1-216-829-11	RES-CHIP	4.7K 5% 1/10W	R7048	1-216-025-11	RES-CHIP	100 5% 1/10W
R5404	1-216-829-11	RES-CHIP	4.7K 5% 1/10W	R7050	1-216-833-11	RES-CHIP	10K 5% 1/10W
R5405	1-216-829-11	RES-CHIP	4.7K 5% 1/10W	R7051	1-216-025-11	RES-CHIP	100 5% 1/10W
R5407	1-216-854-11	RES-CHIP	560K 5% 1/10W	R7052	1-216-025-11	RES-CHIP	100 5% 1/10W
R5408	1-216-825-11	RES-CHIP	2.2K 5% 1/10W	R7053	1-216-049-11	RES-CHIP	1K 5% 1/10W
R5409	1-208-802-11	METAL CHIP	6.8K 0.5% 1/10W	R7054	1-216-847-11	RES-CHIP	150K 5% 1/10W
R5410	1-208-798-11	METAL CHIP	4.7K 0.5% 1/10W	R7056	1-218-867-11	METAL CHIP	6.8K 0.5% 1/10W
R5411	1-216-061-91	RES-CHIP	3.3K 5% 1/10W	R7057	1-216-842-11	RES-CHIP	56K 5% 1/10W
R5413	1-208-802-11	METAL CHIP	6.8K 0.5% 1/10W	R7058	1-216-049-11	RES-CHIP	1K 5% 1/10W
R5414	1-249-383-11	CARBON	1.5 5% 1/4W	R7065	1-216-821-11	RES-CHIP	1K 5% 1/10W
R5415	1-249-389-11	CARBON	4.7 5% 1/4W	R7066	1-216-809-11	RES-CHIP	100 5% 1/10W
R5416	1-215-888-00	METAL OXIDE	220 5% 2W	R7068	1-216-681-11	METAL CHIP	18K 0.5% 1/10W
R5417	1-208-798-11	METAL CHIP	4.7K 0.5% 1/10W	R7070	1-216-817-11	RES-CHIP	470 5% 1/10W
R5420	1-214-798-21	METAL	1.8 1% 1/2W	R7071	1-216-817-11	RES-CHIP	470 5% 1/10W
R5421	1-214-798-21	METAL	1.8 1% 1/2W	R7072	1-216-817-11	RES-CHIP	470 5% 1/10W
R5804	1-216-049-11	RES-CHIP	1K 5% 1/10W	R7073	1-216-041-00	RES-CHIP	470 5% 1/10W
R5805	1-216-049-11	RES-CHIP	1K 5% 1/10W	R7074	1-216-043-91	RES-CHIP	560 5% 1/10W
R5806	1-216-089-91	RES-CHIP	47K 5% 1/10W	R7075	1-216-817-11	RES-CHIP	470 5% 1/10W
R5807	1-216-049-11	RES-CHIP	1K 5% 1/10W	R7076	1-216-041-00	RES-CHIP	470 5% 1/10W
R5808	1-216-049-11	RES-CHIP	1K 5% 1/10W	R7077	1-216-043-91	RES-CHIP	560 5% 1/10W
R5809	1-216-073-91	RES-CHIP	10K 5% 1/10W	R7078	1-216-817-11	RES-CHIP	470 5% 1/10W
R5865	1-216-841-11	RES-CHIP	47K 5% 1/10W	R7079	1-216-041-00	RES-CHIP	470 5% 1/10W
R5869	1-216-817-11	RES-CHIP	470 5% 1/10W	R7080	1-216-043-91	RES-CHIP	560 5% 1/10W
R5871	1-216-850-11	RES-CHIP	270K 5% 1/10W	R7081	1-216-817-11	RES-CHIP	470 5% 1/10W
R5872	1-216-073-91	RES-CHIP	10K 5% 1/10W	R7082	1-208-782-11	METAL CHIP	1K 0.5% 1/10W
R5873	1-216-073-91	RES-CHIP	10K 5% 1/10W	R7088	1-208-783-11	METAL CHIP	1.1K 0.5% 1/10W
R5875	1-216-825-11	RES-CHIP	2.2K 5% 1/10W	R7089	1-216-819-11	RES-CHIP	680 5% 1/10W
R5877	1-216-821-11	RES-CHIP	1K 5% 1/10W	R7090	1-216-819-11	RES-CHIP	680 5% 1/10W
R5878	1-216-820-11	RES-CHIP	820 5% 1/10W	R7091	1-216-819-11	RES-CHIP	680 5% 1/10W
R5879	1-216-809-11	RES-CHIP	100 5% 1/10W	R7092	1-216-295-91	SHORT CHIP	0
R5880	1-216-809-11	RES-CHIP	100 5% 1/10W	R7093	1-216-295-91	SHORT CHIP	0
R5881	1-216-833-11	RES-CHIP	10K 5% 1/10W	R7094	1-216-295-91	SHORT CHIP	0
R5882	1-216-833-11	RES-CHIP	10K 5% 1/10W	R7095	1-216-295-91	SHORT CHIP	0
R5884	1-216-841-11	RES-CHIP	47K 5% 1/10W	R7096	1-216-803-11	RES-CHIP	33 5% 1/10W
R5885	1-216-809-11	RES-CHIP	100 5% 1/10W	R7097	1-216-803-11	RES-CHIP	33 5% 1/10W
R5887	1-216-809-11	RES-CHIP	100 5% 1/10W	R7098	1-216-803-11	RES-CHIP	33 5% 1/10W
R5888	1-216-809-11	RES-CHIP	100 5% 1/10W	< CRYSTAL >			
R5889	1-208-806-11	METAL CHIP	10K 0.5% 1/10W	X2000	1-760-628-11	VIBRATOR, CRYSTAL	
R5892	1-216-833-11	RES-CHIP	10K 5% 1/10W	X3200	1-781-946-21	VIBRATOR, CRYSTAL	
R5895	1-216-833-11	RES-CHIP	10K 5% 1/10W	X5800	1-767-127-11	VIBRATOR, CERAMIC	
R5898	1-216-832-11	RES-CHIP	8.2K 5% 1/10W	<b>A Board, Variant Parts KV-28FX66B/32FX66B</b>			
R5899	1-216-863-11	RES-CHIP	3.3M 5% 1/10W	< CAPACITOR >			
R6200	1-216-635-11	METAL CHIP	220 0.5% 1/10W	C1011	1-163-253-11	CERAMIC CHIP 120PF	5.00% 50V
R6201	1-216-643-11	METAL CHIP	470 0.5% 1/10W	C1012	1-163-245-11	CERAMIC CHIP 56PF	5.00% 50V
R6202	1-249-395-11	CARBON	15 5% 1/4W	C1016	1-162-915-11	CERAMIC CHIP 10PF	0.50PF 50V
R7007	1-216-049-11	RES-CHIP	1K 5% 1/10W				
R7018	1-216-025-11	RES-CHIP	100 5% 1/10W				
R7023	1-216-834-11	RES-CHIP	12K 5% 1/10W				
R7034	1-216-025-11	RES-CHIP	100 5% 1/10W				

REF.NO.	PART.NO	DESCRIPTION	REMARK
C1017	1-163-247-91	CERAMIC CHIP 68PF	5.00% 50V
	< COIL >		
L1004	1-412-751-11	INDUCTOR 18UH	
	< TRANSISTOR >		
Q1002	8-729-010-29	TRANSISTOR MSD601-RST1	
Q1003	8-729-900-53	TRANSISTOR DTC114EK	
	< RESISTOR >		
R1011	1-216-815-11	RES-CHIP 330 5% 1/10W	
R1012	1-216-815-11	RES-CHIP 330 5% 1/10W	
R1014	NOT FITTED		
R1015	1-216-817-11	RES-CHIP 470 5% 1/10W	
R1016	1-216-809-11	RES-CHIP 100 5% 1/10W	
R1018	1-216-825-11	RES-CHIP 2.2K 5% 1/10W	
R1020	1-216-295-91	SHORT CHIP 0	
	< TUNER >		
TU1000	8-598-535-12	FRONTEND BTF-EF411	

#### A Board, Variant Parts KV-28FX66E/32FX66E/32FX66K

	< CAPACITOR >		
C1011	NOT FITTED		
C1012	NOT FITTED		
C1016	NOT FITTED		
C1017	NOT FITTED		
	< COIL >		
L1004	NOT FITTED		
	< TRANSISTOR >		
Q1002	NOT FITTED		
Q1003	NOT FITTED		
	< RESISTOR >		
R1011	NOT FITTED		
R1012	NOT FITTED		
R1014	1-216-295-91	SHORT CHIP 0	
R1015	NOT FITTED		
R1016	NOT FITTED		
R1018	NOT FITTED		
R1020	NOT FITTED		
	< TUNER >		
TU1000	8-598-533-01	FRONTEND BTF-EC411	

REF.NO.	PART.NO	DESCRIPTION	REMARK
<b>A Board, Variant Parts KV-28FX66U/32FX66U</b>			

	< CAPACITOR >		
C1011	NOT FITTED		
C1012	NOT FITTED		
C1016	NOT FITTED		
C1017	NOT FITTED		
	< COIL >		
L1004	NOT FITTED		
	< TRANSISTOR >		
Q1002	NOT FITTED		
Q1003	NOT FITTED		
	< RESISTOR >		
R1011	NOT FITTED		
R1012	NOT FITTED		
R1014	1-216-295-91	SHORT CHIP 0	
R1015	NOT FITTED		
R1016	NOT FITTED		
R1018	NOT FITTED		
R1020	NOT FITTED		
	< TUNER >		
TU1000	8-598-529-01	FRONTEND BTF-EU611	

\*A-1300-530-A D2 Board, Complete (KV-28FX66)

\*A-1300-514-A D2 Board, Complete (KV-32FX66)

3-710-578-01	COVER, VOLUME, 6 MOLD
4-382-854-01	SCREW (M3X8), P, SW (+)

#### D2 Board Common Parts

	< CAPACITOR >		
C6802	1-130-483-00	MYLAR 0.01UF	5.00% 50V
C6803	1-165-176-11	CERAMIC CHIP 0.047UF	10.00% 16V
C6804	1-136-813-11	FILM 680PF	5.00% 100V
C6805	1-126-964-11	ELECT 10UF	20.00% 50V
C6806	1-128-551-11	ELECT 22UF	20.00% 63V
C6807	1-130-495-00	MYLAR 0.1UF	5.00% 50V
C6808	1-126-947-11	ELECT 47UF	20.00% 35V
C6809	1-162-966-11	CERAMIC CHIP 0.0022UF	10.00% 50V
C6810	1-162-115-00	CERAMIC 330PF	10.00% 1KV
C6811	1-162-115-00	CERAMIC 330PF	10.00% 1KV
C6812	1-135-946-81	FILM 47000PF	3% 800V
C6813	1-126-967-11	ELECT 47UF	20.00% 50V
C6814	1-126-947-11	ELECT 47UF	20.00% 35V
C6815	1-130-483-00	MYLAR 0.01UF	5.00% 50V

REF.NO.	PART.NO	DESCRIPTION	REMARK	REF.NO.	PART.NO	DESCRIPTION	REMARK
C6816	1-126-964-11	ELECT	10UF	20.00%	50V		
C6820	1-130-495-00	MYLAR	0.1UF	5.00%	50V		
C6821	1-126-964-11	ELECT	10UF	20.00%	50V		
C6822	1-126-966-11	ELECT	33UF	20.00%	50V		
C6823	1-126-933-11	ELECT	100UF	20.00%	16V		
C6824	1-113-610-11	ELECT (BLOCK)	220UF	20.00%	250V		
C6825	1-130-495-00	MYLAR	0.1UF	5.00%	50V		
C6826	1-126-969-11	ELECT	220UF	20.00%	50V		
C6827	1-162-970-11	CERAMIC CHIP	0.01UF	10.00%	25V		
C6834	1-162-970-11	CERAMIC CHIP	0.01UF	10.00%	25V		
C6835	1-127-715-91	CERAMIC CHIP	0.22UF	10%	16V		
C6836	1-136-165-00	FILM	0.1UF	5.00%	50V		
C6837	1-136-103-00	FILM	0.1UF	5.00%	200V		
C6840	1-130-495-00	MYLAR	0.1UF	5.00%	50V		
C6842	1-130-471-00	MYLAR	0.001UF	5.00%	50V		
C6843	1-135-945-81	FILM	10000PF	3%	800V		
C6848	1-126-963-11	ELECT	4.7UF	20.00%	50V		
C6849	1-162-962-11	CERAMIC CHIP	470PF	10.00%	50V		
C6850	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V		
C6852	1-162-970-11	CERAMIC CHIP	0.01UF	10.00%	25V		
C6853	1-126-933-11	ELECT	100UF	20.00%	16V		
C8930	1-129-898-00	FILM	0.0022UF	5.00%	630V		
C8932	1-136-205-11	MYLAR	0.022UF	5.00%	630V		
C8938	1-162-131-11	CERAMIC	220PF	10.00%	2KV		
C8939	1-162-129-00	CERAMIC	150PF	10.00%	2KV		
C8944	1-137-150-11	FILM	0.01UF	5.00%	100V		
C8945	1-126-947-11	ELECT	47UF	20.00%	35V		
C8953	1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V		
< CONNECTOR >							
CN6800	*1-564-511-11	PLUG, CONNECTOR	8P				
CN6801	1-691-772-11	PLUG (MICRO CONNECTOR)	10P				
CN6803	1-695-915-11	TAB (CONTACT)					
CN6804	*1-564-506-11	PLUG, CONNECTOR	3P				
< DIODE >							
D6800	8-719-052-90	DIODE D1NL40-TA2					
D6801	8-719-110-41	DIODE RD15ESB2					
D6802	8-719-110-41	DIODE RD15ESB2					
D6803	8-719-911-19	DIODE 1SS119-25					
D6806	8-719-109-85	DIODE RD5.1ESB2					
D6811	8-719-911-19	DIODE 1SS119-25					
D6813	8-719-911-19	DIODE 1SS119-25					
D6814	8-719-982-21	DIODE MTZJ-30C					
D6815	8-719-911-19	DIODE 1SS119-25					
D6816	8-719-110-41	DIODE RD15ESB2					
D6817	8-719-063-73	DIODE D1NL20U-TR					
D6820	8-719-921-63	DIODE MTZJ-7.5B					
D6821	8-719-110-49	DIODE RD18ESB2					
D6822	8-719-063-73	DIODE D1NL20U-TR					
D6823	8-719-911-19	DIODE 1SS119-25					
D6824	8-719-911-19	DIODE 1SS119-25					
D6825	8-719-911-19	DIODE 1SS119-25					
D6831	8-719-911-19	DIODE 1SS119-25					
D6832	8-719-911-19	DIODE 1SS119-25					
D8919	8-719-948-45	DIODE ERA22-08					
D8927	8-719-991-33	DIODE 1SS133T-77					
< FERRITE BEAD >							
FB6801	1-412-911-11	FERRITE	0UH				
FB8901	1-535-143-61	LEAD, JUMPER	(5.0MM)				
< IC >							
IC6800	8-759-670-30	IC MCZ3001D					
IC6801	8-759-700-07	IC NJM2903M					
IC6802	8-759-701-01	IC NJM2904M					
IC6803	8-759-462-09	IC TLV431AIDBV					
IC6807	8-759-586-17	IC TL1431CZ-AP					
< COIL >							
L6802	1-419-658-11	INDUCTOR	107UH				
L8901	1-406-674-11	INDUCTOR	3.3MH				
< TRANSISTOR >							
Q6801	8-729-901-81	TRANSISTOR 2SC2412K-T-146-R					
Q6802	8-729-901-81	TRANSISTOR 2SC2412K-T-146-R					
Q6803	8-729-120-28	TRANSISTOR 2SC1623-L5L6					
Q6804	8-729-044-42	TRANSISTOR IRFI644G-LF36					
Q6805	8-729-044-42	TRANSISTOR IRFI644G-LF36					
Q6807	8-729-120-28	TRANSISTOR 2SC1623-L5L6					
Q6808	8-729-120-28	TRANSISTOR 2SC1623-L5L6					
Q6813	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX					
Q6814	8-729-900-53	TRANSISTOR DTC114EK					
Q6815	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX					
Q6816	8-729-900-53	TRANSISTOR DTC114EK					
Q6817	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX					
Q8909	6-550-012-01	TRANSISTOR STP5NB40 (033Y)					
Q8918	1-801-806-11	TR DTC144EKA					
< RESISTOR >							
R6801	1-216-841-11	RES-CHIP	47K 5% 1/10W				
R6802	1-216-849-11	RES-CHIP	220K 5% 1/10W				
R6803	1-216-829-11	RES-CHIP	4.7K 5% 1/10W				
R6804	1-216-829-11	RES-CHIP	4.7K 5% 1/10W				
R6805	1-215-481-00	METAL	330K 1% 1/4W				
R6806	1-215-481-00	METAL	330K 1% 1/4W				
R6807	1-215-481-00	METAL	330K 1% 1/4W				
R6808	1-211-981-11	METAL CHIP	33 0.5% 1/10W				
R6809	1-218-823-11	METAL CHIP	100 0.5% 1/10W				
R6810	1-249-417-11	CARBON	1K 5% 1/4W				



**Note :** The components identified by shading and marked  $\Delta$  are critical for safety. Replace only with the part numbers specified in the parts list.

**D2**

REF.NO.	PART.NO	DESCRIPTION	REMARK	REF.NO.	PART.NO	DESCRIPTION	REMARK
R6811	1-202-933-61	FUSIBLE	0.1 10% 1/2W	R6896	1-216-839-11	RES-CHIP	33K 5% 1/10W
R6812	1-218-869-11	METAL CHIP	8.2K 0.5% 1/10W	R6897	1-216-853-11	RES-CHIP	470K 5% 1/10W
R6813	1-249-393-11	CARBON	10 5% 1/4W	R8949	1-216-486-21	METAL OXIDE	8.2K 5% 3W
R6814	1-249-393-11	CARBON	10 5% 1/4W	R8951	1-216-486-21	METAL OXIDE	8.2K 5% 3W
R6815	1-216-833-11	RES-CHIP	10K 5% 1/10W	R8954	1-260-123-11	CARBON	100K 5% 1/2W
R6816	1-216-833-11	RES-CHIP	10K 5% 1/10W	R8955	1-260-123-11	CARBON	100K 5% 1/2W
R6817	1-243-979-71	METAL OXIDE	0.1 5% 2W	R8956	1-260-123-11	CARBON	100K 5% 1/2W
R6818	1-249-389-11	CARBON	4.7 5% 1/4W	R8957	1-216-829-11	RES-CHIP	4.7K 5% 1/10W
R6819	1-535-143-61	LEAD, JUMPER (5.0MM)		R8988	1-260-123-11	CARBON	100K 5% 1/2W
R6820	1-216-837-11	RES-CHIP	22K 5% 1/10W	R8989	1-249-429-11	CARBON	10K 5% 1/4W
R6821	1-216-837-11	RES-CHIP	22K 5% 1/10W	R8990	1-216-840-11	RES-CHIP	39K 5% 1/10W
R6823	1-247-843-11	CARBON	3.3K 5% 1/4W	R8991	1-216-834-11	RES-CHIP	12K 5% 1/10W
R6825	1-218-912-11	METAL CHIP	510K 0.5% 1/10W	< RESISTOR VARIABLE >			
R6828	1-218-895-11	METAL CHIP	100K 0.5% 1/10W	RV6800	1-241-763-11	RES, ADJ, CERMET 4.7K	
R6829	1-216-841-11	RES-CHIP	47K 5% 1/10W	< SPARK GAP >			
R6832	1-216-841-11	RES-CHIP	47K 5% 1/10W	SG6800	1-517-499-21	GAP, SPARK	
R6833	1-216-833-11	RES-CHIP	10K 5% 1/10W	< TRANSFORMER >			
R6834	1-216-821-11	RES-CHIP	1K 5% 1/10W	T8901	1-437-690-11	TRANSFORMER, FERRITE (DFT)	
R6835	1-215-433-00	METAL	3.3K 1% 1/4W	<b>D2 Board, Variant Parts KV-28FX66</b>			
R6839	1-215-447-00	METAL	12K 1% 1/4W	< RESISTOR >			
R6840	1-535-143-61	LEAD, JUMPER (5.0MM)		R6827	1-216-849-11	RES CHIP	220K 5% 1/10W
R6841	1-218-847-11	METAL CHIP	1K 0.5% 1/10W	R6836	1-215-449-00	METAL	15K 1% 1/4W
R6843	1-218-845-11	METAL CHIP	820 0.5% 1/10W	R6837	1-215-449-00	METAL	15K 1% 1/4W
R6844	1-218-875-11	METAL CHIP	15K 0.5% 1/10W	R6838	1-215-445-00	METAL	10K 1% 1/4W
R6845	1-218-855-11	METAL CHIP	2.2K 0.5% 1/10W	R8950	1-216-486-21	METAL OXIDE	8.2K 5% 3W
R6846	1-218-868-11	METAL CHIP	7.5K 0.5% 1/10W	R8952	1-216-486-21	METAL OXIDE	8.2K 5% 3W
R6847	1-218-847-11	METAL CHIP	1K 0.5% 1/10W	< TRANSFORMER >			
R6848	1-216-817-11	RES-CHIP	470 5% 1/10W	T6800 $\Delta$	1-453-378-21	TRANSFORMER, ASSY, FLYBACK (NX-6020//Z214)	
R6849	1-535-143-71	LEAD, JUMPER (7.5MM)		<b>D2 Board, Variant Parts KV-32FX66</b>			
R6850	1-535-143-71	LEAD, JUMPER (7.5MM)		< RESISTOR >			
R6852	1-216-845-11	RES-CHIP	100K 5% 1/10W	R6827	1-218-893-11	METAL CHIP	82K 0.5% 1/4W
R6865	1-216-835-11	RES-CHIP	15K 5% 1/10W	R6836	1-215-447-00	METAL	12K 1% 1/4W
R6867	1-216-809-11	RES-CHIP	100 5% 1/10W	R6837	1-215-447-00	METAL	12K 1% 1/4W
R6868	1-216-797-11	RES-CHIP	10 5% 1/10W	R6838	1-215-447-00	METAL	12K 1% 1/4W
R6869	1-216-833-11	RES-CHIP	10K 5% 1/10W	R8950	1-215-923-00	METAL OXIDE	10K 5% 3W
R6870	1-216-849-11	RES-CHIP	220K 5% 1/10W	R8952	1-215-923-00	METAL OXIDE	10K 5% 3W
R6872	1-249-377-11	CARBON	0.47 5% 1/4W	< TRANSFORMER >			
R6873	1-249-431-11	CARBON	15K 5% 1/4W	T6800 $\Delta$	1-453-444-11	TRANSFORMER, ASSY, FLYBACK (NX-6020//Z2B4)	
R6874	1-218-903-11	METAL CHIP	220K 0.5% 1/10W	< RESISTOR >			
R6875	1-216-863-11	RES-CHIP	3.3M 5% 1/10W	R6827	1-218-893-11	METAL CHIP	82K 0.5% 1/4W
R6876	1-215-485-00	METAL	470K 1% 1/4W	R6836	1-215-447-00	METAL	12K 1% 1/4W
R6877	1-215-485-00	METAL	470K 1% 1/4W	R6837	1-215-447-00	METAL	12K 1% 1/4W
R6878	1-216-821-11	RES-CHIP	1K 5% 1/10W	R6838	1-215-447-00	METAL	12K 1% 1/4W
R6880	1-219-751-51	CARBON	47K 5% 1/2W	R8950	1-215-923-00	METAL OXIDE	10K 5% 3W
R6881	1-219-749-51	CARBON	10K 5% 1/2W	R8952	1-215-923-00	METAL OXIDE	10K 5% 3W
R6882	1-216-841-11	RES-CHIP	47K 5% 1/10W	< TRANSFORMER >			
R6883	1-211-985-11	METAL CHIP	47 0.5% 1/10W	T6800 $\Delta$	1-453-444-11	TRANSFORMER, ASSY, FLYBACK (NX-6020//Z2B4)	
R6884	1-218-874-11	METAL CHIP	13K 0.5% 1/10W	< RESISTOR >			
R6885	1-216-841-11	RES-CHIP	47K 5% 1/10W	R6827	1-218-893-11	METAL CHIP	82K 0.5% 1/4W
R6887	1-249-411-11	CARBON	330 5% 1/4W	R6836	1-215-447-00	METAL	12K 1% 1/4W



**Note :** The components identified by shading and marked  $\Delta$  are critical for safety. Replace only with the part numbers specified in the parts list.

**C**

REF.NO.	PART.NO	DESCRIPTION	REMARK	REF.NO.	PART.NO	DESCRIPTION	REMARK
<b>*A-1300-578-A C Board, Complete</b>				D7378	8-719-109-89	DIODE RD5.6ESB2	
				D7379	8-719-109-89	DIODE RD5.6ESB2	
	4-382-854-01	SCREW (M3X8) , P, SW (+)		< IC >			
	< CAPACITOR >			IC7300	8-759-360-83	IC TDA6111Q/N4	
C7303	1-162-909-11	CERAMIC CHIP 4PF	0.25PF 50V	IC7325	8-759-360-83	IC TDA6111Q/N4	
C7304	1-107-967-11	ELECT 1UF	20.00% 400V	IC7350	8-759-360-83	IC TDA6111Q/N4	
C7305	1-136-207-11	MYLAR 0.047UF	5.00% 630V	< SOCKET >			
C7306	1-163-009-91	CERAMIC CHIP 0.001UF	10.00% 50V	J7375 $\Delta$	1-251-732-11	SOCKET, CRT	
C7308	1-162-909-11	CERAMIC CHIP 4PF	0.25PF 50V	< COIL >			
C7309	1-163-035-00	CERAMIC CHIP 0.047UF	50V	L7375	1-410-671-31	INDUCTOR 47UH	
C7310	1-163-247-91	CERAMIC CHIP 68PF	5.00% 50V	L7376 $\Delta$	1-532-637-00	LINK, IC 1A/150V	ICP-F25
C7325	1-162-909-11	CERAMIC CHIP 4PF	0.25PF 50V	L7378	1-414-934-21	INDUCTOR 10UH	
C7326	1-163-009-91	CERAMIC CHIP 0.001UF	10.00% 50V	< TRANSISTOR >			
C7330	1-136-207-11	MYLAR 0.047UF	5.00% 630V	Q7350	8-729-901-06	TRANSISTOR DTA144EK	
C7331	1-162-909-11	CERAMIC CHIP 4PF	0.25PF 50V	Q7352	8-729-421-19	TRANSISTOR UN2213	
C7333	1-163-035-00	CERAMIC CHIP 0.047UF	50V	Q7353	8-729-421-19	TRANSISTOR UN2213	
C7334	1-163-247-91	CERAMIC CHIP 68PF	5.00% 50V	Q7354	8-729-901-06	TRANSISTOR DTA144EK	
C7350	1-126-947-11	ELECT 47UF	20.00% 35V	Q7355	8-729-421-19	TRANSISTOR UN2213	
C7351	1-162-909-11	CERAMIC CHIP 4PF	0.25PF 50V	< RESISTOR >			
C7352	1-163-009-91	CERAMIC CHIP 0.001UF	10.00% 50V	R7300	1-249-417-11	CARBON 1K 5% 1/4W	
C7354	1-126-933-11	ELECT 100UF	20.00% 16V	R7302	1-535-143-61	LEAD, JUMPER (5.0MM)	
C7355	1-107-967-11	ELECT 1UF	20.00% 400V	R7303	1-216-824-11	RES-CHIP 1.8K 5% 1/10W	
C7356	1-136-207-11	MYLAR 0.047UF	5.00% 630V	R7304	1-260-095-11	CARBON 470 5% 1/2W	
C7358	1-162-909-11	CERAMIC CHIP 4PF	0.25PF 50V	R7305	1-215-903-11	METAL OXIDE 68K 5% 2W	
C7359	1-163-035-00	CERAMIC CHIP 0.047UF	50V	R7306	1-535-143-61	LEAD, JUMPER (5.0MM)	
C7360	1-163-247-91	CERAMIC CHIP 68PF	5.00% 50V	R7309	1-216-824-11	RES-CHIP 1.8K 5% 1/10W	
C7378	1-162-116-00	CERAMIC 680PF	10.00% 2KV	R7310	1-216-819-11	RES-CHIP 680 5% 1/10W	
C7379	1-162-114-00	CERAMIC 0.0047UF	2KV	R7325	1-249-417-11	CARBON 1K 5% 1/4W	
C7380	1-107-662-11	ELECT 22UF	20.00% 350V	R7327	1-535-143-61	LEAD, JUMPER (5.0MM)	
C7384	1-162-911-11	CERAMIC CHIP 6PF	0.50PF 50V	R7328	1-216-824-11	RES-CHIP 1.8K 5% 1/10W	
C7385	1-162-913-11	CERAMIC CHIP 8PF	0.50PF 50V	R7329	1-260-095-11	CARBON 470 5% 1/2W	
C7387	1-162-911-11	CERAMIC CHIP 6PF	0.50PF 50V	R7330	1-215-903-11	METAL OXIDE 68K 5% 2W	
C7388	1-162-913-11	CERAMIC CHIP 8PF	0.50PF 50V	R7331	1-535-143-61	LEAD, JUMPER (5.0MM)	
C7390	1-162-911-11	CERAMIC CHIP 6PF	0.50PF 50V	R7334	1-216-819-11	RES-CHIP 680 5% 1/10W	
C7391	1-162-913-11	CERAMIC CHIP 8PF	0.50PF 50V	R7335	1-216-824-11	RES-CHIP 1.8K 5% 1/10W	
	< CONNECTOR >			R7350	1-249-417-11	CARBON 1K 5% 1/4W	
CN7300	*1-564-508-11	PLUG, CONNECTOR 5P		R7355	1-535-143-61	LEAD, JUMPER (5.0MM)	
CN7301	*1-564-512-11	PLUG, CONNECTOR 9P		R7356	1-216-824-11	RES-CHIP 1.8K 5% 1/10W	
CN7311	1-695-915-11	TAB (CONTACT)		R7357	1-260-095-11	CARBON 470 5% 1/2W	
CN7333	1-695-915-11	TAB (CONTACT)		R7358	1-215-903-11	METAL OXIDE 68K 5% 2W	
	< DIODE >			R7360	1-535-143-61	LEAD, JUMPER (5.0MM)	
D7300	8-719-911-19	DIODE 1SS119-25		R7363	1-216-819-11	RES-CHIP 680 5% 1/10W	
D7325	8-719-911-19	DIODE 1SS119-25		R7364	1-216-824-11	RES-CHIP 1.8K 5% 1/10W	
D7350	8-719-911-19	DIODE 1SS119-25		R7373	1-216-823-11	RES-CHIP 1.5K 5% 1/10W	
D7375	8-719-991-33	DIODE 1SS133T-77					
D7376	8-719-991-33	DIODE 1SS133T-77					

REF.NO.	PART.NO	DESCRIPTION	REMARK	REF.NO.	PART.NO	DESCRIPTION	REMARK
R7374	1-216-819-11	RES-CHIP 680 5%	1/10W	C0023	8-719-109-89	DIODE RD5.6ESB2	
R7375	1-249-435-11	CARBON 33K 5%	1/4W	C0024	8-719-109-89	DIODE RD5.6ESB2	
R7376	1-249-429-11	CARBON 10K 5%	1/4W	C0025	1-162-962-11	CERAMIC CHIP 470PF	10.00% 50V
R7377	1-249-430-11	CARBON 12K 5%	1/4W	C0026	1-162-962-11	CERAMIC CHIP 470PF	10.00% 50V
R7379	1-216-833-11	RES-CHIP 10K 5%	1/10W	C0027	1-162-962-11	CERAMIC CHIP 470PF	10.00% 50V
R7380	1-216-833-11	RES-CHIP 10K 5%	1/10W	C0028	1-126-934-11	ELECT 220UF	20.00% 16V
R7381	1-216-833-11	RES-CHIP 10K 5%	1/10W	C0029	1-164-360-11	CERAMIC CHIP 0.1UF	16V
R7382	1-202-549-00	SOLID 100 20%	1/2W	C0030	1-164-360-11	CERAMIC CHIP 0.1UF	16V
R7383	1-216-347-11	METAL OXIDE 0.68 5%	1W	C0031	1-164-360-11	CERAMIC CHIP 0.1UF	16V
R7385	1-202-549-00	SOLID 100 20%	1/2W	C0032	1-164-360-11	CERAMIC CHIP 0.1UF	16V
R7387	1-247-735-11	CARBON 47 5%	1/2W	C0033	1-162-916-11	CERAMIC CHIP 12PF	5.00% 50V
R7388	1-535-143-51	LEAD, JUMPER (20.0MM)		< CONNECTOR >			
R7389	1-247-881-00	CARBON 120K 5%	1/4W	CN0001	1-793-497-11	CONNECTOR, BOARD TO BOARD 40P	
R7390	1-249-417-11	CARBON 1K 5%	1/4W	CN0002	*1-564-520-11	PLUG, CONNECTOR 5P	
R7391	1-216-824-11	RES-CHIP 1.8K 5%	1/10W	CN0003	*1-564-518-11	PLUG, CONNECTOR 3P	
R7392	1-216-819-11	RES-CHIP 680 5%	1/10W	< DIODE >			
R7393	1-216-823-11	RES-CHIP 1.5K 5%	1/10W	D0001	6-500-079-01	DIODE BAS40-05E6327	
R7394	1-249-417-11	CARBON 1K 5%	1/4W	D0301	8-719-069-56	DIODE UDZSTE-176.2B	
R7395	1-216-824-11	RES-CHIP 1.8K 5%	1/10W	< FERRITE BEAD >			
R7396	1-216-819-11	RES-CHIP 680 5%	1/10W	FB0003	1-216-295-91	SHORT CHIP 0	
R7397	1-216-823-11	RES-CHIP 1.5K 5%	1/10W	FB0004	1-412-006-31	INDUCTOR 10UH	
R7398	1-249-417-11	CARBON 1K 5%	1/4W	FB0005	1-216-864-11	SHORT CHIP 0	
R7399	1-216-824-11	RES-CHIP 1.8K 5%	1/10W	FB0006	1-412-006-31	INDUCTOR 10UH	
< RESISTOR VARIABLE >				FB0007	1-412-006-31	INDUCTOR 10UH	
RV7375	1-241-656-11	RES, ADJ, METAL FILM 110M		FB0008	1-216-295-91	SHORT CHIP 0	
<b>*A-1400-284-A M2 Board, Complete</b>				FB0009	1-412-006-31	INDUCTOR 10UH	
	1-540-151-21	SOCKET, IC		FB0010	1-216-295-91	SHORT CHIP 0	
< CAPACITOR >				FB0011	1-216-295-91	SHORT CHIP 0	
C0001	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V	FB0012	1-412-006-31	INDUCTOR 10UH	
C0002	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V	FB0015	1-216-864-11	SHORT CHIP 0	
C0004	1-164-360-11	CERAMIC CHIP 0.1UF	16V	FB0016	1-216-864-11	SHORT CHIP 0	
C0006	1-126-934-11	ELECT 220UF	20.00% 16V	FB0017	1-216-295-91	SHORT CHIP 0	
C0007	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V	FB0018	1-216-295-91	SHORT CHIP 0	
C0008	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V	FB0019	1-216-295-91	SHORT CHIP 0	
C0009	1-165-128-11	CERAMIC CHIP 0.22UF	16V	FB0020	1-216-295-91	SHORT CHIP 0	
C0010	1-162-927-11	CERAMIC CHIP 100PF	5.00% 50V	FB0021	1-216-295-91	SHORT CHIP 0	
C0011	1-164-360-11	CERAMIC CHIP 0.1UF	16V	FB0022	1-412-006-31	INDUCTOR 10UH	
C0012	1-162-924-11	CERAMIC CHIP 56PF	5.00% 50V	< IC >			
C0013	1-164-360-11	CERAMIC CHIP 0.1UF	16V	IC0001	8-759-699-33	IC M24C16-MN6T(A)	
C0015	1-135-834-91	CERAMIC CHIP 2.2E+06PF	6.3V	IC0002	6-702-515-01	IC SAA5665HL/M1D/0724	
C0016	1-165-128-11	CERAMIC CHIP 0.22UF	16V	IC0003	8-759-672-39	IC PST573IMT	
C0017	1-162-924-11	CERAMIC CHIP 56PF	5.00% 50V	IC0004	8-759-665-11	IC LM393DT	
C0019	1-164-360-11	CERAMIC CHIP 0.1UF	16V	IC0005	6-702-395-01	IC K6F2008V2E-YF70T	
C0020	1-162-923-11	CERAMIC CHIP 47PF	5.00% 50V	IC0006	6-702-494-01	IC M27W201-80K6TR-BMW100	
C0021	8-719-109-89	DIODE RD5.6ESB2		IC0007	8-759-271-86	IC TC7SH04FU	
C0022	8-719-109-89	DIODE RD5.6ESB2					

REF.NO.	PART.NO	DESCRIPTION	REMARK	REF.NO.	PART.NO	DESCRIPTION	REMARK
IC0008	8-759-392-01	IC TC7SH86FU-TE85R		R0048	1-216-809-11	RES-CHIP	100 5% 1/10W
IC0010	8-759-523-81	IC TC74VHC08FT (EL)		R0049	1-216-833-11	RES-CHIP	10K 5% 1/10W
< TRANSISTOR >				R0050	1-216-810-11	RES-CHIP	120 5% 1/10W
Q0002	8-729-424-08	TRANSISTOR UN2111		R0051	1-216-835-11	RES-CHIP	15K 5% 1/10W
Q0003	8-729-424-08	TRANSISTOR UN2111		R0052	1-216-810-11	RES-CHIP	120 5% 1/10W
Q0006	8-729-010-29	TRANSISTOR MSD601-RST1		R0053	1-216-809-11	RES-CHIP	100 5% 1/10W
Q0007	8-729-027-44	TRANSISTOR DTC114TKA-T146		R0054	1-216-809-11	RES-CHIP	100 5% 1/10W
Q0008	8-729-027-44	TRANSISTOR DTC114TKA-T146		R0055	1-216-809-11	RES-CHIP	100 5% 1/10W
Q0009	8-729-027-44	TRANSISTOR DTC114TKA-T146		R0056	1-216-833-11	RES-CHIP	10K 5% 1/10W
Q0010	8-729-027-44	TRANSISTOR DTC114TKA-T146		R0057	1-216-809-11	RES-CHIP	100 5% 1/10W
Q0011	8-729-010-29	TRANSISTOR MSD601-RST1		R0058	1-216-823-11	RES-CHIP	1.5K 5% 1/10W
Q0012	8-729-424-08	TRANSISTOR UN2111		R0059	1-216-841-11	RES-CHIP	47K 5% 1/10W
Q0013	8-729-421-22	TRANSISTOR UN2211		R0060	1-216-833-11	RES-CHIP	10K 5% 1/10W
Q0014	8-729-421-19	TRANSISTOR UN2213		R0061	1-216-833-11	RES-CHIP	10K 5% 1/10W
Q0015	8-729-010-29	TRANSISTOR MSD601-RST1		R0062	1-216-833-11	RES-CHIP	10K 5% 1/10W
< RESISTOR >				R0063	1-216-833-11	RES-CHIP	10K 5% 1/10W
JR0002	1-216-864-11	SHORT CHIP	0	R0064	1-216-833-11	RES-CHIP	10K 5% 1/10W
R0001	1-216-819-11	RES-CHIP	680 5% 1/10W	R0065	1-216-833-11	RES-CHIP	10K 5% 1/10W
R0002	1-216-824-11	RES-CHIP	1.8K 5% 1/10W	R0066	1-218-871-11	METAL CHIP	10K 0.5% 1/10W
R0003	1-216-809-11	RES-CHIP	100 5% 1/10W	R0067	1-216-833-11	RES-CHIP	10K 5% 1/10W
R0011	1-216-809-11	RES-CHIP	100 5% 1/10W	R0068	1-216-833-11	RES-CHIP	10K 5% 1/10W
R0014	1-216-837-11	RES-CHIP	22K 5% 1/10W	R0069	1-216-833-11	RES-CHIP	10K 5% 1/10W
R0016	1-216-809-11	RES-CHIP	100 5% 1/10W	R0070	1-216-809-11	RES-CHIP	100 5% 1/10W
R0017	1-216-843-11	RES-CHIP	68K 5% 1/10W	R0071	1-216-809-11	RES-CHIP	100 5% 1/10W
R0018	1-216-809-11	RES-CHIP	100 5% 1/10W	R0072	1-216-809-11	RES-CHIP	100 5% 1/10W
R0019	1-216-073-91	RES-CHIP	10K 5% 1/10W	R0073	1-216-809-11	RES-CHIP	100 5% 1/10W
R0020	1-216-821-11	RES-CHIP	1K 5% 1/10W	R0074	1-216-809-11	RES-CHIP	100 5% 1/10W
R0022	1-216-809-11	RES-CHIP	100 5% 1/10W	R0075	1-216-809-11	RES-CHIP	100 5% 1/10W
R0023	1-216-845-11	RES-CHIP	100K 5% 1/10W	R0076	1-216-821-11	RES-CHIP	1K 5% 1/10W
R0027	1-216-821-11	RES-CHIP	1K 5% 1/10W	R0078	1-216-817-11	RES-CHIP	470 5% 1/10W
R0028	1-216-833-11	RES-CHIP	10K 5% 1/10W	R0079	1-216-829-11	RES-CHIP	4.7K 5% 1/10W
R0029	1-216-809-11	RES-CHIP	100 5% 1/10W	R0081	1-216-809-11	RES-CHIP	100 5% 1/10W
R0030	1-216-809-11	RES-CHIP	100 5% 1/10W	R0082	1-216-864-11	SHORT CHIP	0
R0032	1-216-809-11	RES-CHIP	100 5% 1/10W	R0083	1-216-809-11	RES-CHIP	100 5% 1/10W
R0033	1-216-809-11	RES-CHIP	100 5% 1/10W	R0084	1-216-809-11	RES-CHIP	100 5% 1/10W
R0034	1-218-725-11	METAL CHIP	24K 0.5% 1/16W	R0085	1-216-809-11	RES-CHIP	100 5% 1/10W
R0035	1-218-867-11	METAL CHIP	6.8K 0.5% 1/10W	R0086	1-216-841-11	RES-CHIP	47K 5% 1/10W
R0037	1-216-827-11	RES-CHIP	3.3K 5% 1/10W	R0087	1-216-841-11	RES-CHIP	47K 5% 1/10W
R0039	1-216-809-11	RES-CHIP	100 5% 1/10W	R0088	1-216-809-11	RES-CHIP	100 5% 1/10W
R0040	1-216-809-11	RES-CHIP	100 5% 1/10W	R0301	1-216-833-11	RES-CHIP	10K 5% 1/10W
R0041	1-216-825-11	RES-CHIP	2.2K 5% 1/10W	R0302	1-216-833-11	RES-CHIP	10K 5% 1/10W
R0042	1-218-867-11	METAL CHIP	6.8K 0.5% 1/10W	R0303	1-216-836-11	RES-CHIP	18K 5% 1/10W
R0043	1-216-803-11	RES-CHIP	33 5% 1/10W	R0304	1-218-867-11	METAL CHIP	6.8K 0.5% 1/10W
R0044	1-216-809-11	RES-CHIP	100 5% 1/10W	< CRYSTAL >			
R0045	1-216-803-11	RES-CHIP	33 5% 1/10W	X0001	1-578-774-71	VIBRATOR, CRYSTAL	
R0046	1-216-803-11	RES-CHIP	33 5% 1/10W				
R0047	1-216-810-11	RES-CHIP	120 5% 1/10W				

REF.NO.	PART.NO	DESCRIPTION	REMARK
<b>*A-1400-969-A L Board, Complete</b>			

< CAPACITOR >

C0701	1-162-913-11	CERAMIC CHIP 8PF	0.50PF 50V
C0702	1-164-227-11	CERAMIC CHIP 0.022UF	10.00% 25V
C0703	1-162-908-11	CERAMIC CHIP 3PF	0.25PF 50V
C0705	1-162-923-11	CERAMIC CHIP 47PF	5.00% 50V
C0706	1-162-923-11	CERAMIC CHIP 47PF	5.00% 50V

< CONNECTOR >

CN0701	*1-564-508-11	PLUG, CONNECTOR 5P	
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< DIODE >

D0701	8-719-050-37	DIODE M1MA152WA-T1	
D0702	6-500-286-01	DIODE TLP65600-AS12Z	

< IC >

IC0701	6-702-266-01	IC MC33493DTBR2	
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< COIL >

L0701	1-216-864-11	SHORT CHIP	0
L0702	1-216-864-11	SHORT CHIP	0
L0703	1-216-864-11	SHORT CHIP	0
L0704	1-216-864-11	SHORT CHIP	0

< TRANSISTOR >

Q0701	8-729-010-05	TRANSISTOR MSB709-RT1	
Q0702	8-729-421-19	TRANSISTOR UN2213	

< RESISTOR >

R0702	1-216-841-11	RES-CHIP	47K	5%	1/10W
R0703	1-216-834-11	RES-CHIP	12K	5%	1/10W
R0704	1-216-841-11	RES-CHIP	47K	5%	1/10W
R0705	1-216-841-11	RES-CHIP	47K	5%	1/10W
R0706	1-216-817-11	RES-CHIP	470	5%	1/10W
R0707	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R0708	1-216-841-11	RES-CHIP	47K	5%	1/10W
R0709	1-216-809-11	RES-CHIP	100	5%	1/10W
R0710	1-216-809-11	RES-CHIP	100	5%	1/10W

< SWITCH >

S0701	1-692-431-21	SWITCH, TACTILE	
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< CRYSTAL >

X0701	1-795-590-11	QUARTZ CRYSTAL UNIT	
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REF.NO.	PART.NO	DESCRIPTION	REMARK
<b>*A-1300-627-A VM Board, Complete</b>			

4-382-854-01 SCREW (M3X8), P, SW (+)

< CAPACITOR >

C7401	1-126-935-11	ELECT	470UF	20.00% 16V
C7403	1-126-935-11	ELECT	470UF	20.00% 16V
C7404	1-115-339-11	CERAMIC CHIP	0.1UF	10.00% 50V
C7405	1-126-933-11	ELECT	100UF	20.00% 16V
C7406	1-126-935-11	ELECT	470UF	20.00% 16V

C7407	1-107-364-11	MYLAR	0.01UF	10.00% 200V
C7408	1-107-364-11	MYLAR	0.01UF	10.00% 200V
C7409	1-107-649-11	ELECT	2.2UF	20.00% 250V
C7410	1-130-471-00	MYLAR	0.001UF	5.00% 50V
C7411	1-130-471-00	MYLAR	0.001UF	5.00% 50V

C7412	1-126-935-11	ELECT	470UF	20.00% 16V
C7413	1-126-935-11	ELECT	470UF	20.00% 16V
C7414	1-107-652-11	ELECT	10UF	20.00% 250V
C7415	1-107-363-91	MYLAR	0.0068UF	10.00% 200V
C7418	1-163-021-91	CERAMIC CHIP	0.01UF	10.00% 50V

C7421	1-163-251-11	CERAMIC CHIP	100PF	5.00% 50V
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< CONNECTOR >

CN7442	*1-564-508-11	PLUG, CONNECTOR 5P	
CN7443	*1-564-506-11	PLUG, CONNECTOR 3P	
CN7444	*1-770-723-11	CONNECTOR, BOARD TO BOARD 8P	

< DIODE >

D7400	8-719-991-33	DIODE 1SS133T-77	
D7401	8-719-991-33	DIODE 1SS133T-77	
D7402	1-535-143-61	LEAD, JUMPER (5.0MM)	
D7403	8-719-991-33	DIODE 1SS133T-77	
D7404	8-719-991-33	DIODE 1SS133T-77	

D7405	8-719-924-11	DIODE MTZJ-T-77-22	
D7406	8-719-924-11	DIODE MTZJ-T-77-22	

< FERRITE BEAD >

FB7400	1-535-143-61	LEAD, JUMPER (5.0MM)	
FB7401	1-535-143-61	LEAD, JUMPER (5.0MM)	

< COIL >

L7400	1-414-934-21	INDUCTOR	10UH
L7402	1-414-934-21	INDUCTOR	10UH
L7403	1-414-934-21	INDUCTOR	10UH

< TRANSISTOR >

Q7400	8-729-010-29	TRANSISTOR MSD601-RST1	
Q7401	8-729-010-29	TRANSISTOR MSD601-RST1	
Q7402	8-729-010-29	TRANSISTOR MSD601-RST1	

REF.NO.	PART.NO	DESCRIPTION	REMARK
Q7403	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q7404	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q7405	8-729-026-39	TRANSISTOR 2SA933AS-QT	
Q7406	8-729-045-05	TRANSISTOR 2SA2005	
Q7407	8-729-045-04	TRANSISTOR 2SC5511	
Q7408	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q7409	8-729-010-29	TRANSISTOR MSD601-RST1	
< RESISTOR >			
R7400	1-216-017-91	RES-CHIP	47 5% 1/10W
R7401	1-216-061-91	RES-CHIP	3.3K 5% 1/10W
R7402	1-216-041-00	RES-CHIP	470 5% 1/10W
R7403	1-249-393-11	CARBON	10 5% 1/4W
R7404	1-249-413-11	CARBON	470 5% 1/4W
R7405	1-216-065-91	RES-CHIP	4.7K 5% 1/10W
R7407	1-249-411-11	CARBON	330 5% 1/4W
R7409	1-216-029-00	RES-CHIP	150 5% 1/10W
R7410	1-216-017-91	RES-CHIP	47 5% 1/10W
R7411	1-216-017-91	RES-CHIP	47 5% 1/10W
R7412	1-216-017-91	RES-CHIP	47 5% 1/10W
R7413	1-249-414-11	CARBON	560 5% 1/4W
R7414	1-249-432-11	CARBON	18K 5% 1/4W
R7415	1-247-739-11	CARBON	100 5% 1/2W
R7416	1-249-389-11	CARBON	4.7 5% 1/4W
R7417	1-249-432-11	CARBON	18K 5% 1/4W
R7418	1-249-414-11	CARBON	560 5% 1/4W
R7419	1-249-421-11	CARBON	2.2K 5% 1/4W
R7420	1-249-421-11	CARBON	2.2K 5% 1/4W
R7421	1-249-389-11	CARBON	4.7 5% 1/4W
R7422	1-249-405-11	CARBON	100 5% 1/4W
R7423	1-215-915-11	METAL OXIDE	470 5% 3W
R7427	1-216-025-11	RES-CHIP	100 5% 1/10W
R7428	1-216-033-00	RES-CHIP	220 5% 1/10W
R7429	1-216-033-00	RES-CHIP	220 5% 1/10W
R7432	1-216-065-91	RES-CHIP	4.7K 5% 1/10W
R7433	1-249-395-11	CARBON	15 5% 1/4W
R7434	1-249-395-11	CARBON	15 5% 1/4W
R7435	1-216-031-00	RES-CHIP	180 5% 1/10W
R7436	1-216-049-11	RES-CHIP	1K 5% 1/10W

**\*A-1625-000-A F4 Board, Complete**

\*4-374-846-01 COVER, CAPACITOR, CAP TYPE

< CAPACITOR >

C6991		1-113-924-11	CERAMIC	0.0047UF	20.00%	250V
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< CONNECTOR >

CN6991	△	1-580-843-11	PIN, CONNECTOR (POWER)
CN6992	△	*1-691-291-11	PIN, CONNECTOR (PC BOARD) 5P

REF.NO.	PART.NO	DESCRIPTION	REMARK
CN6993	1-695-915-11	TAB (CONTACT)	
< FUSE >			
F6991	△ 1-576-232-11	FUSE (H.B.C.)	5A/250V
	△ 1-533-725-11	HOLDER, FUSE (F6991)	
< RESISTOR >			
R6991	△ 1-202-719-00	SOLID	1M 10% 1/2W
< SWITCH >			
S6991	△ 1-571-433-21	SWITCH, PUSH (AC POWER)	
< VARISTOR >			
VD6991	△ 1-803-830-11	VARISTOR (ERZV14D621)	
<b>*A-1646-243-A H1 Board, Complete</b>			
4-206-220-01 HOLDER, LED			
< CAPACITOR >			
C0992	1-104-665-11	ELECT	100UF 20.00% 25V
C0993	1-102-114-00	CERAMIC	470PF 10.00% 50V
C0994	1-102-129-00	CERAMIC	0.01UF 10.00% 50V
< CONNECTOR >			
CN0991	*1-564-507-11	PLUG, CONNECTOR 4P	
< DIODE >			
D0991	8-719-109-89	DIODE RD5.6ESB2	
D0993	8-719-082-12	DIODE TLHK5190	
< IC >			
IC0991	8-742-180-30	HYB IC SBX3081-51(30)	
< RESISTOR >			
R0992	1-247-807-31	CARBON	100 5% 1/4W

**\*A-1647-043-A H2 Board, Complete**

< CAPACITOR >

C2906	1-126-960-11	ELECT	1UF	20.00%	50V
C2907	1-126-960-11	ELECT	1UF	20.00%	50V
C2913	1-162-964-11	CERAMIC CHIP	0.001UF	10.00%	50V
C2914	1-162-964-11	CERAMIC CHIP	0.001UF	10.00%	50V

< CONNECTOR >

CN2900	1-779-947-11	TERMINAL BLOCK, S
CN2906	*1-564-524-11	PLUG, CONNECTOR 9P



REF.NO.	PART.NO	DESCRIPTION	REMARK	REF.NO.	PART.NO	DESCRIPTION	REMARK
CN2908	1-564-521-11	PLUG, CONNECTOR 6P					
	< SOCKET >						
J2900	1-750-264-11	JACK					
	< COIL >						
L0904	1-535-143-61	LEAD, JUMPER (5.0MM)					
L2900	1-535-143-61	LEAD, JUMPER (5.0MM)					
L2901	1-535-143-61	LEAD, JUMPER (5.0MM)					
L2902	1-535-143-61	LEAD, JUMPER (5.0MM)					
L2903	1-535-143-61	LEAD, JUMPER (5.0MM)					
	< RESISTOR >						
R912	1-535-143-61	LEAD, JUMPER (5.0MM)					
R0901	1-249-427-11	CARBON	6.8K 5% 1/4W				
R0902	1-215-445-00	METAL	10K 1% 1/4W				
R0911	1-249-419-11	CARBON	1.5K 5% 1/4W				
R0913	1-247-843-11	CARBON	3.3K 5% 1/4W				
R0914	1-249-431-11	CARBON	15K 5% 1/4W				
R2903	1-249-406-11	CARBON	120 5% 1/4W				
R2904	1-249-406-11	CARBON	120 5% 1/4W				
R2909	1-247-895-91	CARBON	470K 5% 1/4W				
R2910	1-247-895-91	CARBON	470K 5% 1/4W				
R2915	1-249-406-11	CARBON	120 5% 1/4W				
R2916	1-249-406-11	CARBON	120 5% 1/4W				
R2917	1-249-412-11	CARBON	390 5% 1/4W				
R2918	1-249-412-11	CARBON	390 5% 1/4W				
	< SWITCH >						
S0900	1-692-979-11	SWITCH, TACTILE					
S0901	1-692-979-11	SWITCH, TACTILE					
S0902	1-692-979-11	SWITCH, TACTILE					

**Note :** The components identified by shading and marked  $\Delta$  are critical for safety. Replace only with the part numbers specified in the parts list.

REF.NO.	PART.NO	DESCRIPTION	REMARK	REF.NO.	PART.NO	DESCRIPTION	REMARK
<b>MISCELLANEOUS</b>				4-088-479-41	INSTRUCTION MANUAL (KV-28FX66E) (GERMAN/GREEK/TURKISH)		
$\Delta$	1-571-433-21	SWITCH, PUSH (AC POWER)		4-088-479-11	INSTRUCTION MANUAL (KV-28FX66U) (ENGLISH)		
$\Delta$	1-823-853-11	CORD, POWER (KV-28FX66B/28FX66E/32FX66B/ KV-32FX66E/32FX66K)		4-088-952-21	INSTRUCTION MANUAL (KV-32FX66B) (GERMAN/FRENCH/ITALIAN/DUTCH)		
$\Delta$	1-776-860-12	POWER CORD, FILTER (UK) (KV-28FX66U/32FX66U)		4-088-952-31	INSTRUCTION MANUAL (KV-32FX66B) (ENGLISH)		
	1-424-855-11	COIL, CHOKE 29MMH		4-088-952-11	INSTRUCTION MANUAL (KV-32FX66E) (GERMAN/GREEK/TURKISH)		
	8-598-535-12	FRONTEND BTF-EF411 (KV-28FX66B/32FX66B)		4-088-952-51	INSTRUCTION MANUAL (KV-32FX66E) (ITALIAN)		
	8-598-533-01	FRONTEND BTF-EC411 (KV-28FX66E/32FX66E/ KV-32FX66K)		4-088-952-61	INSTRUCTION MANUAL (KV-32FX66E) (SPANISH/PORTUGUESE/DANISH/FINNISH/ NORWEGIAN/SWEDISH)		
	8-598-529-01	FRONTEND BTF-EU611 (KV-28FX66U/32FX66U)		4-088-952-41	INSTRUCTION MANUAL (KV-32FX66K) (BULGARIAN/CZECH/ENGLISH/HUNGARIAN/ POLISH/RUSSIAN)		
$\Delta$	1-453-378-21	TRANSFORMER ASSY, FLYBACK (NX6020//Z214) (KV-28FX66)		4-088-952-71	INSTRUCTION MANUAL (KV-32FX66U) (ENGLISH)		
$\Delta$	1-453-444-11	TRANSFORMER ASSY, FLYBACK (NX6020//Z2B4) (KV-32FX66)		<b>REMOTE COMMANDER</b>			
	1-529-899-11	SPEAKER (4.2x24CM)		1-477-155-11	REMOTE COMMANDER (RM-937)		
	1-529-417-11	SPEAKER (8CM) (KV-28FX66)					
	1-529-408-11	SPEAKER (4.2x24CM) (KV-32FX66)					
$\Delta$	8-451-521-21	DEFLECTION YOKE (Y28RVC3-B2) (KV-28FX66)					
$\Delta$	1-451-480-22	DEFLECTION YOKE (Y32RVC2) (KV-32FX66)					
	1-419-363-11	COIL, NA ROTATION (RT200) (KV-28FX66)					
	1-452-896-11	COIL, NA ROTATION (RT200) (KV-32FX66)					
	8-453-011-11	NECK ASSY, (NA299-M)					
$\Delta$	1-424-886-11	COIL, DEGAUSSING (KV-28FX66)					
$\Delta$	1-424-888-11	COIL, DEGAUSSING (KV-32FX66)					
$\Delta$	1-251-946-21	CAP ASSY, HIGH-VOLTAGE (KV-28FX66)					
$\Delta$	1-251-374-32	CAP ASSY, HIGH-VOLTAGE (KV-32FX66)					
$\Delta$	8-735-099-05	PICTURE TUBE (W66LLX060X) (KV-28FX66)					
$\Delta$	8-735-079-05	PICTURE TUBE (W76LLZ060X) (KV-32FX66)					
	1-452-094-00	MAGNET, ROTATABLE DISK; 15MM					
	1-452-032-00	MAGNET, DISK; 10MM					
<b>ACCESSORIES AND PACKAGING MATERIALS</b>							
	*4-395-957-01	BAG, PROTECTION (KV-28FX66)					
	*4-046-772-01	BAG, PROTECTION (KV-32FX66)					
	*4-088-337-01	PAPER CUSHION ASSY (KV-28FX66)					
	*4-205-513-01	CUSHION (UPPER) (ASSY) (KV-32FX66)					
	*4-205-514-01	CUSHION (LOWER) (ASSY) (KV-32FX66)					
	*4-089-384-01	INDIVIDUAL CARTON (KV-28FX66)					
	*4-205-512-01	INDIVIDUAL CARTON (KV-32FX66)					
	4-088-479-21	INSTRUCTION MANUAL (KV-28FX66B) (GERMAN/FRENCH/ITALIAN/DUTCH)					
	4-088-479-01	INSTRUCTION MANUAL (KV-28FX66B) (ENGLISH)					
	4-088-479-61	INSTRUCTION MANUAL (KV-28FX66E) (SPANISH/PORTUGUESE/DANISH/FINNISH/ NORWEGIAN/SWEDISH)					
	4-088-479-51	INSTRUCTION MANUAL (KV-28FX66E) (ITALIAN)					